NEC

STOCK # 152032

NEAX®2000 IVS^2

INTEGRATED VOICE SERVER

Series 2300 (R4.1) Addendum

Contents

Feature Programming Manual [ND-70915 (E), Issue 3] . . . . .Addendum - 001

SEPTEMBER, 2001

NEC America, Inc.

NEAX 2000 IVS^2
Feature Programming Manual

ND-70915 (E)
Issue 3
Addendum-001
September, 2001

GENERAL

This addendum supplements the NEAX 2000 IVS^2 Feature Programming Manual [ND-70915 (E)].

REASON FOR ISSUE

This addendum is issued to add the Series 2300 (R4.1) software enhancement and correct errors.

PAGE REPLACEMENT INSTRUCTIONS

Replace pages:	iii~vi, 74, 83, 95, 143, 144, 157, 221, 222, 224, 225, 226, 228, 229, 232, 245, 254, 257, 260, 318, 337, 338, 385, 388, 395, 397, 417, 446, 447, 448, 454, 484~488, 504, 505, 537, 540, 542, 543, 553, 561.
Add pages:	57-1, 57-2, 148-1~148-10, 225-1~225-6, 283-1, 283-2, 504-1, 504-2.

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APPENDIX A TERMINAL KEY ASSIGNMENT A1

APPENDIX B CHARACTER CODE TABLE B1

This page is for your notes.

INTRODUCTION

PURPOSE

This manual explains the feature programming and hardware requirements for each business and hotel service feature in the NEAX2000 IVS^2.

OUTLINE OF THIS MANUAL

The contents of Chapters 1 and 2, and Appendix A and B are outlined below.

CHAPTER 1 BUSINESS FEATURES

This chapter explains the programming procedure and hardware requirements for Business Features in this system.

CHAPTER 2 HOTEL FEATURES

This chapter explains the following information related to the Hotel System and Property Management System (PMS).

- System configuration for the Hotel System and the Property Management System (PMS)
- Hardware requirement
- Programming procedure of the Hotel features
- Programming procedure of the Property Management System interface

APPENDIX A TERMINAL KEY ASSIGNMENT

This appendix contains the key number layout of each D^{term}, ATTCON, DESKCON, DSS Console, and Add-On Module.
Refer to this appendix to assign a key function by CM90 or CM97 in Chapter 1 and Chapter 2.

APPENDIX B CHARACTER CODE TABLE

This appendix contains the character code table to set a station name displayed on D^{term} or Attendant Console.

REFERENCE MANUAL

For detailed descriptions of each command, refer to the Command Manual.
For the features which are not specified in this manual, refer to the individual manuals listed below.

Command Manual	Describes Customer Administration Terminal (CAT) operation, command function and setting data required for programming the system, and Resident System Program.
NEAXMail AD-8 System Manual	Describes the hardware installation procedure and programming procedure for the NEAXMail AD-8 System.
CCIS System Manual	Describes the system description, hardware installation procedure, programming procedure and operation test procedure for the CCIS System.
Data Interface System Manual	Describes the system description, hardware installation procedure, programming procedure and operation test procedure for the Data Interface System.
ISDN System Manual	Describes the system description, hardware installation procedure, programming procedure and operation test procedure for the ISDN System.
Maintenance Manual	Describes the maintenance service features and the recommended troubleshooting procedure.
OAI System Manual	Describes the system description, hardware installation procedure, programming procedure and troubleshooting procedure for the Open Application Interface (OAI).
Q-SIG System Manual	Describes the system description, hardware installation procedure, and programming procedure for the Q-SIG System.
Remote PIM System Manual	Describes the system description, hardware installation procedure, and troubleshooting procedure for the Remote PIM System.
IP System Manual	Describes the system description, hardware installation procedure, programming procedure for the VoIP System.
WCS System Manual	Describes the system description, hardware installation procedure, programming procedure for the WCS System.

HOW TO READ THIS MANUAL

Chapter 1 and Chapter 2 explain the feature programming for each service feature in regard to the following items.

Programming

This section explains the programming procedure for each service feature.
The meanings of (1), (2) and ◀ marking are as follows.

(1) : 1st data

(2) : 2nd data

◀ : Initial data; With the system data clear command (CM00, CM01), the data with this marking is automatically set for each command.

INITIAL : Reset of the MP card is required after data setting.
Press SW1 switch on the MP card.

AP00 INITIAL : Reset of the AP00 card is required after data setting.
Set the Make Busy switch to UP and then DOWN.

AP01 INITIAL : Reset of the AP01 card is required after data setting.
Set the Make Busy switch to UP and then DOWN.

CFT INITIAL Reset of the CFTC card is required after data setting.
Set the Make Busy switch to UP and then DOWN.

DTI INITIAL : Reset of the DTI card is required after data setting.
Set the Make Busy switch to UP and then DOWN.

OFF LINE : A command with this marking can only be used under Off-Line mode of the MP card.

AP OFF LINE : A command with this marking can only be used under Off-Line mode of the AP00 card.

Hardware Required

In the Hardware Required sections, required hardware for each service feature is listed, except the following:

Single line telephone set and interface card (LC card)
Central Office Trunk card (COT card)
Attendant Console and interface card

For Direct Digital Interface (DDI), Message Center Interface (MCI), and Station Message Detail Recording (SMDR), the following sections explain the system in further detail.

System Outline

DTI (DDI only)

PLO (DDI only)

System Capacity

System Operation (MCI only)

Time Slot Allocation (DDI only)

DTI Specifications (DDI only)

Programming Summary (SMDR only)

CHAPTER 1

BUSINESS FEATURES

This chapter explains the programming procedure and hardware requirements.

Explanations are given in alphabetical order of the feature names except the features on the next page, which require no programming.

The following features require no programming:

- Alarm Indications
- Attendant Console
  - Attendant Called/Calling Number
  - Attendant Lamp Check
  - Attendant Training Jacks
  - Audible Indication Control
  - Call Processing Indication
  - Time Display
- Attendant Lockout
- Elapsed Call Timer
- Feature Activation from Secondary Extension
- Handsfree Answerback
- Hands Free Dialling and Monitoring
- Non Exclusive Hold
- Maintenance Administration Terminal (MAT)
  - Battery Release Control
  - Configuration Report
- Proprietary Multiline Terminal
  - Called Station Status Display
  - Handsfree Unit
  - I-Hold/I-Use Indication
  - Microphone Control
- Reserve Power
- Resident System Program

ACCOUNT CODE

Programming

START

	DESCRIPTION	DATA
CM08	Specify whether Service Set Tone should be sent after dialing the access code for Account Code entry.	(1) 362 (2) 0 : No Tone 1◀ : Service Set Tone
CM12	Assign the Service Restriction Class A for Account Code entry to the required stations.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15◀ : Service Restriction Class A
CM15	Allow Account Code in the Service Restriction Class A assigned by CM12 YY=02.	• YY=30 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM42	Specify the maximum number of digits for Account Codes. **Note:** *If the SMDR message format (NEAX2400 IMS Format) is assigned, the maximum number of digits is 10.*	(1) 10 (2) 01-16: Maximum number of digits If no data is entered, the default is 10.
CM20	Assign an access code for Account Code entry.	• Y=0-3: Numbering Plan Group 0-3 (1) X-XXXX: Access Code (* #) (2) A085
CM90	Assign an Account Code feature access key to a D^{term}.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0085

END

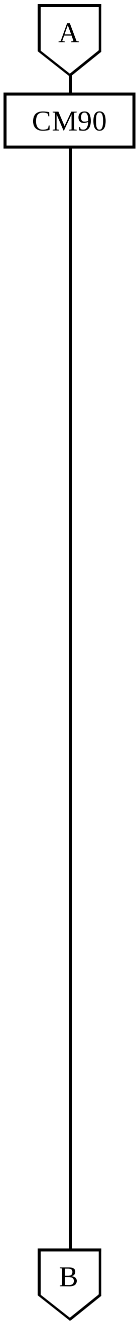
Hardware Required

SMDR (AP00 card and cables)

ADD-ON MODULE

Programming

START	DESCRIPTION	DATA
CM10	Assign the Add-On Module number to its associated LEN. **Note:** *When the data assignment of both DSS Console and Add-On Module are required, the same number (the last two digits of the data) cannot be used.*	(1) 000-763: LEN (2) EC00-EC31: Add-On Module No. For PIM 0/1: EC00-EC07 For PIM 2/3: EC08-EC15 For PIM 4/5: EC16-EC23 For PIM 6/7: EC24-EC31 **Note**
CM98	Assign the D^{term} which is associated with the Add-On Module. **Note:** *The D^{term} and the Add-On Module must be in the same PIM.*	• Y=0 (1) 00-31: Last two digits of Add-On Module No. EC00-EC31 (2) X-XXXXXXXX: My Line No.
CM12	Assign the Service Restriction Class for the accommodation of Single-Line Telephone to D^{term} (Assignment for Single-Line Telephone only).	• YY=05 (1) X-XXXXXXXX: Station No. (2) 0: Accommodated
CM90	Assign the station and trunk numbers to the keys on each Add-On Module. **Note:** *Single-Line, Virtual Line or My Line can be assigned on Add-On Module.*	• YY=00 (1) My Line No. + $\boxed{,}$ + Add-On Module Key No. (30-54) (2) X-XXXXXXXX: Station No. **Note** DXXX XXX: 000-255 (Trunk No.)
A		



DESCRIPTION	DATA
Assign the Automatic/Manual/Dial Intercom key to each Add-On Module, if required. For details, refer to INTERCOM.	• YY=00 (1) My Line No. + $\boxed{,}$ + Add-On Module Key No. (30-54) (2) A000-A031, A100-A131: Automatic Intercom No. A200-A700, A201-A701...A224-A724: Manual Intercom No. B000-B900, B001-B901...B024-B924: Dial Intercom No.
Assign the Station Speed Dialing to the keys on each Add-On Module, if required. For details, refer to STATION SPEED DIALING.	• YY=00 (1) My Line No. + $\boxed{,}$ + Add-On Module Key No. (30-89) (2) F11XX XX: 00-99: Station Speed Dialing 00-99
Specify the tone ringer enabled on call termination for Day mode to each line/trunk key on each Add-On Module, if required.	• YY=01 (1) My Line No. + $\boxed{,}$ + Add-On Module Key No. (30-54) (2) 0 : Disabled 1◀ : Enabled
Assign the Delayed Ringing feature to each line/trunk key on an Add-On Module, if required. **Note:** *Delayed Ringing can be assigned to the first 16 line/trunk keys (Key No. 30-45).*	• YY=03 (1) My Line No. + ☐ + Add-On Module Key No. (30-45) **Note** (2) 0: Delayed Ringing

	DESCRIPTION	DATA
B		
CM41	Specify the Delayed Ringing timing.	• Y=1 (1) 09 (2) 01-10: 2-20 second in 2 second increments If no data is set, the default setting is 10 seconds.
CM30	Provide Trunk-Direct Appearances to the trunk number.	• YY=18 (1) 000-255: Trunk No. (2) 0: To provide
END		

Hardware Required

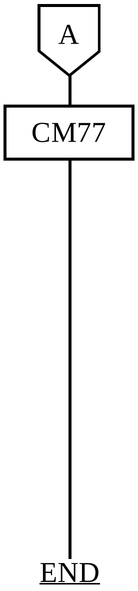
DSS Console

DLC card

ALPHANUMERIC DISPLAY

Programming

START	DESCRIPTION	DATA
CM08	Provide the system with the Name Display Service.	(1) 255 (2) 1◀ : To provide
	Provide station number and name display when an incoming call terminates to a Prime Line and a My Line. **INITIAL**	(1) 335 (2) 0 : Station No. and name display only when incoming call terminates to Prime Line 1◀ : Station No. and name display when incoming call terminates to Prime Line or My Line
CM20	Assign the access code for Name Display.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (62) (2) A110
CM08	Specify the time to go back to Date and Time display after the call answered.	(1) 120 (2) 0 : 10 seconds later 1◀ : 6 seconds later
	Specify the duration to display the name.	(1) 121 (2) 0 : Until call finished 1◀ : As per CM08>120
CM35	Assign a trunk name number to each trunk route.	• YY=03 (1) 00-63: Trunk Route No. (2) 00-14: Trunk Name No. 00-14 15◀ : Kind of trunk route assigned by CM35 YY=00 is displayed 16-63: Trunk Name No. 16-63
CM77	Enter the desired station user's name to each station number by CM77 Y=0 or CM77 Y=1.	• Y=0 By Character Code (1) X-XXXXXXXX: Station No. (2) Character Code 20-7F: Max. 32 digits See APPENDIX B: CHARACTER CODE TABLE. • Y=1 By Character (1) X-XXXXXXXX: Station No. (2) A-Z, 0-9: Character Max. 16 characters
A		



DESCRIPTION	DATA
Assign the desired trunk name to each trunk route by CM77 Y=2 or CM77 Y=3.	• Y=2 By Character Code (1) 00-14, 16-63:Trunk Name No. assigned by CM35 YY=03 (2) Character Code 20-7F: Max. 8 digits See APPENDIX B: CHARACTER CODE TABLE. • Y=3 By Character (1) 00-14, 16-63:Trunk Name No. assigned by CM35 YY=03 (2) Character (A-Z, 0-9) Max. 4 characters

Note 1: *The maximum number of stations that can be provided with the user's name display is 512. The maximum number of characters per name is eight, including spaces. The Maintenance Administration Terminal (MAT) or Customer Administration Terminal (CAT) can be used to register or change a name. A D^{term} can register or change the name assignment of that individual D^{term}.*

Note 2: *User names can be assigned to stations that do not have an LCD.*

Note 3: *The trunk name display is provided on a trunk-route basis. The maximum amount of characters in the trunk name display is four. The maximum number of trunk routes assignable is 16. The MAT or CAT can be used to register or change a trunk name display.*

Note 4: *There are two ways to change a name that is currently programmed.*
(1) By overwriting with a new name, or
(2) By inserting a blank space as the first character to cancel the existing name.

ANALOG PORT ADAPTER

Programming

To assign the Single Port Mode:

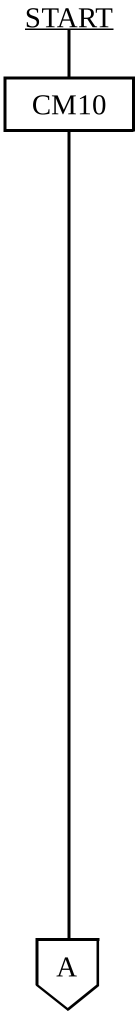
	DESCRIPTION	DATA
START		
CM13	Provide the Analog Port Adapter to the required stations.	• YY=32 (1) X-XXXXXXXX: My Line No. (2) 0: To connect
	Assign the Single Port Mode to the required stations. INITIAL	• YY=33 (1) X-XXXXXXXX: My Line No. (2) 1◀ : Single port mode
	Specify whether a ringing signal is sent to the analog terminal.	• YY=35 (1) X-XXXXXXXX: My Line No. (2) 0 : Not Sent 1◀ : Sent
END		

To assign the Dual Port Mode:

1. Data Assignment for D^{term} accommodates the Analog Port Adapter

	DESCRIPTION	DATA
START		
CM13	Provide the Analog Port Adapter to the required stations.	• YY=32 (1) X-XXXXXXXX: My Line No. (2) 0: To connect
	Assign the Dual Port Mode to the required stations. INITIAL	• YY=33 (1) X-XXXXXXXX: My Line No. (2) 0: Dual port mode
END		

2. Data Assignment for Analog Terminal connected to the Analog Port Adapter



DESCRIPTION	DATA
Assign an analog terminal station number to the required LEN. **Note:** *The analog terminal station number must be assigned to the following LEN: Analog Terminal LEN =D^{term} LEN+8.* *For example, when the DLC card is mounted on LT01 slot.* *For D^{term} LEN: 008-015* *For Analog Terminal LEN: 016-023** **LT02 slot must be vacant.* Assignment Example: CM 10 - LEN 000 =F 200 for D^{term} Primary Extension LEN 008 =F 300 for Analog Terminal If level 0 of the LEN is used for the D^{term}, the adjacent level 0 must be used.	(1) 000-763: LEN (2) FX-FXXXXXXXX: Analog Terminal Station No.

	DESCRIPTION	DATA
A		
CM90	Assign a key for analog terminal.	• YY=00 (1) Analog Terminal Station No. + $\boxed{,}$ + Key No. (2) X-XXXXXXXXXX: Analog Terminal Station No. assigned by CM10
CM93	Assign an analog terminal station number as Prime Line.	(1) X-XXXXXXXX: Analog Terminal Station No. (2) X-XXXXXXXX: Analog Terminal Station No.
CM13	Provide the Analog Port Adapter to the required station.	• YY=34 (1) X-XXXXXXXX: Analog Terminal Station No. (2) 0: To connect
	Specify whether a ringing signal is sent to the analog terminal.	• YY=35 (1) X-XXXXXXXX: My Line No. (2) 0 : Not sent 1◀ : To send
	Specify the PAD control of the analog terminal.	• YY=09 (1) X-XXXXXXXX: Analog Terminal Station No. (2) 0 : Without PAD 1◀ : With PAD 6dB
END		

Hardware Required

Analog Port Adapter

ANNOUNCEMENT SERVICE

Programming

To access the Digital Announcement Trunk (DAT card) from a station or C.O./Tie Line party:

START	DESCRIPTION	DATA
CM08	Specify the Multiple Connections of the Digital Announcement Trunk (DAT card) on Announcement Service.	(1) 124 (2) 0 : Available 1◀ : Not available (Single Connection)
CM10	Assign a Digital Announcement Trunk number to the required LEN. **Note:** *The Digital Announcement Trunk number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.*	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk No. For PIM 0/1: EB002-EB031 For PIM 2/3: EB032-EB063 For PIM 4/5: EB064-EB095 For PIM 6/7: EB096-EB127 **Note:** *EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.*
CM12	Assign the Service Restriction Class A for Announcement Service to the required stations.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Announcement Service in the Service Restriction Class A assigned by CM12 YY=02.	• YY=34 Announcement Service Group 0 (Replay) • YY=35 Announcement Service Group 1 (Replay) • YY=36 Announcement Service Group 2 (Replay) • YY=37 Announcement Service Group 3 (Replay) • YY=38 Announcement Service Group 4 (Replay) • YY=39 Announcement Service Group 0-4 (Record) (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
A		

A

	DESCRIPTION	DATA
CM20	Assign access codes for Announcement Service.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A103: Announcement Service Group 0-4 (Record) A104: Announcement Service Group 0 (Replay) A105: Announcement Service Group 1 (Replay) A106: Announcement Service Group 2 (Replay) A107: Announcement Service Group 3 (Replay) A108: Announcement Service Group 4 (Replay) A109: Announcement Service Group 0-4 (Delete)
CM41	When Multiple Connections is provided (CM08>124=0), specify the duration of message replay for the Announcement Service.	• Y=0 (1) 53 (2) 01-99: 4 sec.-396 sec. in 4 second increments If no data is set, the default setting is 60-64 sec.
CM49	Assign the function for each Digital Announcement Trunk card.	• YY=00 (1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk No. (EB002-EB127) (2) 04X Z X: 0-4 : Group No. Z : 0-9 : Message No.
CM35	To provide a C.O./Tie Line party with this service, assign the Announcement Service Group 0-4 to the required trunk routes.	• YY=69 Announcement Service Group 0 • YY=70 Announcement Service Group 1 • YY=71 Announcement Service Group 2 • YY=72 Announcement Service Group 3 • YY=73 Announcement Service Group 4 (1) 00-63 : Trunk Route No. (2) 1◀ : Allow

END

Note 1: *A maximum of five different announcements can be accessed. There is a limit of 10 Digital Announcement Trunk Circuits for each of the five different announcements. When recording an announcement, each Digital Announcement Trunk Circuit must be recorded individually.*

Note 2: *Each time a station is connected to a Digital Announcement Trunk Circuit, the message will be repeated three times. The station will then be disconnected.*

Note 3: *For the single connection of a Digital Announcement Trunk Circuit, the duration of an announcement is limited to 120 seconds.*

Note 4: *For the multi-connection of a Digital Announcement Trunk Circuit, the duration of replay for an announcement is programmable from 4 to 396 seconds.*

To provide a voice message when an incoming C.O. line/Tie line call has been transferred and encounters a busy or no answer condition:

START	DESCRIPTION	DATA
CM10	Assign a Digital Announcement Trunk card number to the required LEN. **Note:** *The Digital Announcement Trunk Circuit number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.*	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM 0/1: EB002-EB031 For PIM 2/3: EB032-EB063 For PIM 4/5: EB064-EB095 For PIM 6/7: EB096-EB127 **Note:** *EB000 and EB001 are dedicated to the built-in Digital Announcement Trunk of the MP card.*
CM12	Assign the Service Restriction Class A for Digital Announcement Trunk Access (Record/Replay/Delete).	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Digital Announcement Trunk Access in the Service Restriction Class A assigned by CM12 YY=02.	• YY=33 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM65	Assign the feature for a voice message connection to a transferred trunk when the transferred destination does not answer or the transferred destination is busy to the required tenant.	• YY=50 No Answer (1) 00-63: Tenant No. (2) 0 • YY=51 Busy (1) 00-63: Tenant No. (2) 0
A		

A	DESCRIPTION	DATA
CM49	Assign the function for each Digital Announcement Trunk card.	• YY=00 (1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk No. (EB002-EB127) (2) 06XX: No Answer XX : 00-63: Message No. 07XX : Busy XX : 00-63: Message No. • YY=06 No Answer • YY=07 Busy (1) XX: 00-63: Tenant No. of transferring station (2) XX: 00-63: Message No. assigned by CM49 YY=00
CM20	To record, replay and delete a message, assign the respective Digital Announcement Trunk access code.	• Y=0-3 Number Plan Group 0-3 (1) X-XXXX: Access Code (2) A100: Record A101: Replay A102: Delete
END		

Note: *Announcement Service can be used to provide a voice message when an incoming C.O. Line/Tie Line call has been transferred and encounters a busy or no answer condition. After the voice message is given, normal call processing continues.*

- *This application can be programmed on a tenant basis.*
- *Only one (1) message of up to the following seconds can be recorded on an individual Digital Announcement Trunk Circuit.*
  - *Built-in DAT on MP: 120 seconds*
  - *4DAT card: 120 seconds*
- *In this application, a minimum of two Digital Announcement Trunk Circuits are needed, one for busy condition, and one for no answer.*
- *More than one Digital Announcement Trunk Circuit can be used, depending on traffic conditions.*
- *System programming can be set to wait until circuits become free, or immediately follow preprogrammed normal call handling, if a busy condition is encountered.*
- *Digital Announcement Trunk Circuits can be shared among tenants.*
- *This feature does not function on Attendant transferred calls.*

To provide a voice message when an incoming DID line/Tie line call has been terminated to a station and encounters a busy or no answer condition:

START	DESCRIPTION	DATA
CM10	Assign a Digital Announcement Trunk card number to the required LEN. **Note:** *The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.*	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM 0/1: EB002-EB031 For PIM 2/3: EB032-EB063 For PIM 4/5: EB064-EB095 For PIM 6/7: EB096-EB127 **Note:** *EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.*
CM12	Assign the Service Restriction Class A for Digital Announcement Trunk Access (Record/Replay/Delete).	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Digital Announcement Trunk Access in the Service Restriction Class A assigned by CM12 YY=02.	• YY=33 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM41	Specify the transferred timing when an incoming DID Line/Tie Line call encounters a no answer condition.	• Y=0 (1) 01 (2) 01-30: 4-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 sec.
A		

A

	DESCRIPTION	DATA
CM49	Assign the function for each Digital Announcement Trunk card.	• YY=00 (1) 000-001 : Built-in DAT on MP card 002-127 : Digital Announcement Trunk No. (EB002-EB127) (2) 0D00 : No Answer 0E00 : Busy
CM51	Assign the Digital Announcement Trunk as the destination of the DID call on each tenant.	• YY=00 No Answer • YY=03 Busy (1) 00-63: Tenant No. (2) EB000-EB127: Digital Announcement Trunk No.
	Assign the Digital Announcement Trunk as the destination of the Tie Line call on each tenant.	• YY=01 No Answer • YY=04 Busy (1) 00-63: Tenant No. (2) EB000-EB127: Digital Announcement Trunk No.
CM20	To record, replay and delete a message, assign the respective Digital Announcement Trunk access code.	• Y=0-3 Number Plan Group 0-3 (1) X-XXXX: Access Code (2) A100: Record A101: Replay A102: Delete

END

Note: *Announcement Service can be used to provide a voice message when an incoming DID line/Tie line call has been terminated to a station and encounters a busy or no answer condition. After the voice message is given, normal call processing continues.*

- *This application can be programmed on a tenant basis.*
- *Only one (1) message of up to the following seconds can be recorded on an individual Digital Announcement Trunk Circuit.*

Built-in DAT on MP:	*120 seconds*
4DAT card:	*120 seconds*

To provide an Internal Recorded Message from a Digital Announcement Trunk (DAT card) in place of Music On Hold:

START	DESCRIPTION	DATA
CM10	Assign a Digital Announcement Trunk card number to the required LEN. **Note:** *The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.*	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM 0/1: EB002-EB031 For PIM 2/3: EB032-EB063 For PIM 4/5: EB064-EB095 For PIM 6/7: EB096-EB127 **Note:** *EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.*
CM48	Define the type of call to be provided with Hold Message.	• Y=0 (1) 00 : C.O. Line Call 01 : Tie Line Call 02 : Station (2) 0500 : Hold Message
CM49	Assign the function of the Digital Announcement Trunk to Hold Message Service.	• YY=00 (1) 000-001 : Built-in DAT on MP card 002-127 : Digital Announcement Trunk No. (EB002-EB127) assigned by CM10 (2) 05XX : Hold Message Service XX : 00-63: Message No. • YY=05 (1) 00-63 : Tenant No. (2) 00-63 : Message No. assigned by CM49 YY=00
CM20	To record, replay, or delete a message, assign the respective Digital Announcement Trunk access code.	• Y=0-3 Number Plan Group 0-3 (1) X-XXXX: Access Code (2) A100 : Record A101 : Replay A102 : Delete
END		

Note: *A voice message in place of Music-On-Hold can be provided when a call has been placed on hold.*

- *Different messages can be programmed on a tenant basis.*
- *Different messages can be programmed, depending on the type of line (C.O. line, Tie line or station) on hold.*
- *More than one connection can be made to a Digital Announcement Trunk Circuit. Only the first connection can be assured of hearing the message from the beginning.*
- *Announcement will be repeated until the call is removed from hold.*

To provide the Night Announcement by Digital Announcement Trunk (DAT card):

START	**DESCRIPTION**	**DATA**
CM10	Assign each Digital Announcement Trunk card number to the required LEN. **Note:** *The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.*	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM 0/1 : EB002-EB031 For PIM 2/3 : EB032-EB063 For PIM 4/5 : EB064-EB095 For PIM 6/7 : EB096-EB127 **Note:** *EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.*
CM30	Assign the Digital Announcement Trunk number to each incoming trunk.	• YY=03 (1) 000-255 : Trunk No. (2) 04 : Direct-In Termination • YY=05 (1) 000-255 : Trunk No. (2) EB000-EB127: Digital Announcement Trunk No. assigned by CM10
CM49	Assign the function of the Digital Announcement Trunk to Night Announcement.	• YY=00 (1) 000-001 : Built-in DAT on MP card (2) 002-127 : Digital Announcement Trunk No. (EB002-EB127) (3) 03000 : Night Announcement Service
CM41	Specify the duration of an Announcement.	• Y=0 (1) 45 (2) 01-30: 4 sec.-120 sec. in 4 sec. increments If no data is set, the default setting is 60-64 sec.
CM20	To record, replay, or delete a message, assign the respective Digital Announcement Trunk access code.	• Y=0-3 (Numbering Plan Group 0-3) (1) X-XXXX: Access Code (2) A100 : Record A101 : Replay A102 : Delete
END		

Note: *A voice message can be sent to incoming C.O. lines during Night Mode.*

- *Different messages can be programmed on each C.O. line.*
- *The voice message can be programmed for Day/Night.*
- *More than one connection can be made to a Digital Announcement Trunk Circuit. Only the first connection can be assured of hearing the message from the beginning.*
- *Announcements may be programmed to be repeated from 4 to 120 seconds in four-second increments.*

Hardware Required

DAT card or MP card (built-in DAT)

ANSWER KEY

Programming

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class B for Answer Key to the required D^{term}.	• YY=02 (1) X-XXXXXXXX : My Line No. (2) XX ZZ ZZ: 00-15◀: Service Restriction Class B
CM15	Allow Answer Key in the Service Restriction Class B assigned by CM12 YY=02.	• YY=72 (1) 00-15 : Service Restriction Class B assigned by CM12 YY=02 (2) 0 : Allow
END		

Note: *An ANSWER key is initially assigned on each D^{term}.*

Hardware Required

D^{term} and DLC card

ATTENDANT ASSISTED CALLING

Programming

START

	DESCRIPTION	DATA
CM20	Assign the Access code for an operator call.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (0) (2) 800
CM60	Allocate the ATTCON Group number to each ATTCON/DESKCON. INITIAL	• YY=00 (1) 0-7 : ATTCON No. assigned by CM10 (2) 0-3 : ATTCON Group No.
	Assign the Primary ATTCON within the ATTCON Group. INITIAL	• YY=01 (1) 0-7 : ATTCON No. (2) 0 : Primary ATT 1◀ : Not Primary ATT
CM62	Specify the tenants to be handled by each ATT Group. INITIAL	• Y=0-3 ATTCON Group No. 0-3 assigned by CM60 YY=00 (1) 00-63 : Tenant No. (2) 0 : To be handled
CM08	Specify the Attendant access (ATTCON No. 0) capability provided from the stations belonging to a tenant with no Attendant Console.	(1) 142 (2) 0 : Allowed 1◀ : Restricted
	Provide the system with Passing Dial Tone.	(1) 048 (2) 1◀ : Available
	Provide the system with Attendant Night Transfer, if required.	(1) 018 (2) 0 : Not available 1◀ : Available
	Specify the Individual Attendant access capability provided from a station belonging to a different tenant.	(1) 143 (2) 0 : Restricted 1◀ : Allowed

END

ATTENDANT CAMP-ON

Programming

START	DESCRIPTION	DATA
CM08	Specify the Camp-On Tone sent to busy station.	(1) 068 (2) 0 : Camp-on Tone is sent out only once. 1◀ : Camp-on Tone is repeated at an interval of 4 seconds.
CM41	Specify the recall timing of Camp-On.	• Y=0 (1) 00 (2) 01-14 : 2.4-33.6 sec. in 2.4 sec. increments 15-24 : 38.4-124.8 sec. in 9.6 sec. increments If no data is set, the default setting is 31.2-33.6 seconds.
END		

To reenter a Camped-On trunk from an Attendant before Automatic Recall:

START	DESCRIPTION	DATA
CM20	Assign the access code for Call Pickup - Direct.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A021: Call Pickup - Direct
END		

To display the busy station number and name on an Attendant Console when reentering a Camped-On trunk by pressing the loop key:

START	DESCRIPTION	DATA
CM08	Provide the Attendant Console with the busy station number/name display when reentering a Camped-On trunk.	(1) 441 (2) 0 : Available 1◀ : Not available
END		

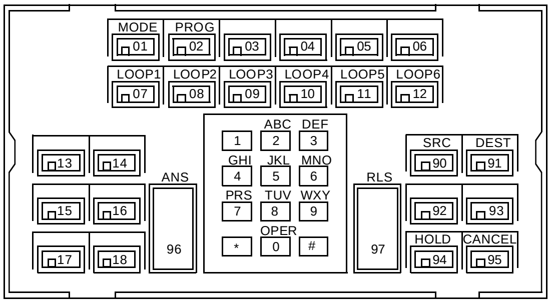
ATTENDANT CONSOLE

SN610 ATTCON

Programming

START

	DESCRIPTION	DATA
CM10	Assign the card number of the interface circuit for the ATTCON to its associated LEN.	(1) 000-763 : LEN (2) E000-E007 : ATTCON No.
CM30	Set the terminating system for the incoming calls to ATTCON.	• YY=02 Day Mode, YY=03 Night Mode, YY=40 Mode A, YY=41 Mode B (1) 000-255 : Trunk No. (2) 14 : Termination to Attendant Console
CM90	Assign the required Attendant Call Selection keys and Function keys to each ATTCON. If no data is set, the default setting is as follows. To assign Multi-Function Key, refer to MULTI-FUNCTION KEY. See Page 51.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6000-F6067 : Type of Calls to be assigned F6100-F6245 : Functions to be assigned



Key No.	Data	Description
01	F6110	Mode
02	F6111	Programming
07-12	F6240-F6245	Loop 1-Loop 6
16	F6061	Recall
17	F6060	Operator Call
18	F6000	C.O. Incoming 0
90	F6200	Source
91	F6201	Destination
94	F6204	Hold
95	F6202	Cancel
96		Answer
97		Release

A

A

	DESCRIPTION	DATA
CM60	Allocate the ATT Group Number to each ATTCON. INITIAL	• YY=00 (1) 0-7 : ATTCON No. (2) 0-3 : ATT GROUP 0-3
	Specify the Primary ATTCON within the ATT Group assigned by CM60 YY=00. INITIAL	• YY=01 (1) 0-7 : ATTCON No. (2) 0 : Primary ATT 1◀ : Not Primary ATT
CM62	Specify the tenants to be handled by each ATT Group. INITIAL	• Y=0-3 (1) 00-63: Tenant No. (2) 0 : To be handled 1◀ : Not handled
CM04	Select language to display on LCD. **(Series 2100 software required)** INITIAL	• YY=00 (1) 00 (2) 1 : English 2 : French 3 : Spanish 4 : Portuguese 7◀ : English

END

SN716 DESKCON

Programming

START

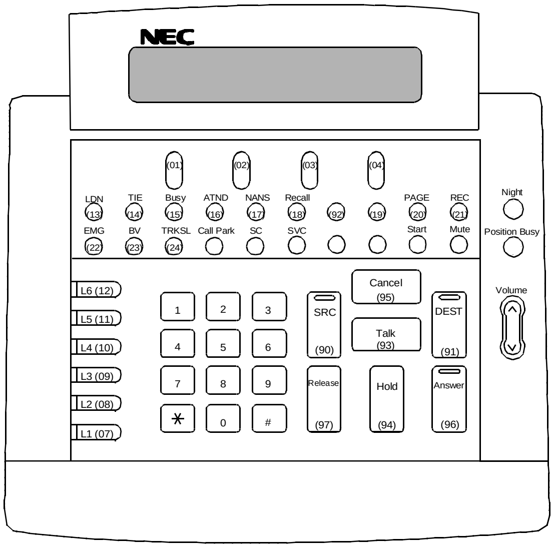
	DESCRIPTION	DATA
CM10	Assign the card number of the interface circuit for the DESKCON to its associated LEN.	(1) 000-763 : LEN (2) E000-E007 : ATTCON No.
CM30	Set the terminating system for the incoming calls to DESKCON.	• YY=02 Day Mode • YY=03 Night Mode • YY=40 Mode A • YY=41 Mode B (1) 000-255 : Trunk No. (2) 14 : Attendant Console
CM90	Assign the required Attendant Call Selection keys and Function keys to each DESKCON, according to the key label. To assign Multi-Function Key, refer to MULTI-FUNCTION KEY. See Page 51.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6000-F6067: Type of Calls to be assigned F6100-F6245: Functions to be assigned

A

A

CM90

DESCRIPTION | **DATA**



KeyNo.	Data	Description (Key Label)	Default Data
13	F6000	C.O. Incoming 0 (LDN)	NONE
14	F6040	Tie Line Incoming 0 (TIE)	NONE
15	F6064	Call Forwarding-Busy Line (Busy)	NONE
16	F6060	Operator Call (ATND)	F6061 (Recall)
17	F6063	Call Forwarding-No Answer (NANS)	F6060 (Operator call)
18	F6061	Recall (Recall)	F6000 (C.O. Incoming 0)
90	F6200	Source (SRC)	F6200 (Source)
91	F6201	Destination (DEST)	F6201 (Destination)
93	F6203	Talk (Talk)	NONE
94	F6204	Hold (Hold)	F6204 (Hold)
95	F6202	Cancel (Cancel)	H6202 (Cancel)
96		Answer (Answer)	
97		Release (Release)	

Note: *When the DESKCON is used to set hotel features, the Reset key should be assigned to one of the feature keys (i.e key 21) in the Idle state mode.*

B

B	DESCRIPTION	DATA
CM60	Specify the kind of the Attendant Console. **INITIAL**	• YY=22 (1) 0-7 : ATTCON No. (2) 0 : DESKCON 1◀ : ATTCON
	Allocate the ATT Group number to each DESKCON. **INITIAL**	• YY=00 (1) 0-7 : ATTCON No. (2) 0-3 : ATT GROUP 0-3
	Specify the Primary DESKCON within the ATT Group assigned by CM60 YY=00. **INITIAL**	• YY=01 (1) 0-7 : ATTCON No. (2) 0 : Primary ATT 1◀ : Not Primary ATT
	When providing second ringing feature on the DESKCON, make Off-Hook Ringing effective.	• YY=16 (1) 0-7 : ATTCON No. (2) 0 : Effective
	Allow or restrict the system to keep the volume level changed by the volume button on the DESKCON, after the call is finished. **(Series 2100 software required)**	• YY=23 (1) 0-7 : ATTCON No. (2) 0 : Allow 1◀ : Restricted
CM62	Specify the tenants to be handled by each ATT Group. **INITIAL**	• Y=0-3 (1) 00-63 : Tenant No. (2) 0 : To be handled 1◀ : Not handled
CM04	Select language to display on LCD. **(Series 2100 software required)** **INITIAL**	• YY=00 (1) 00 (2) 1 : English 2 : French 3 : Spanish 4 : Portuguese 7◀ : English
END		

Attendant Called/Calling Name Display

Programming

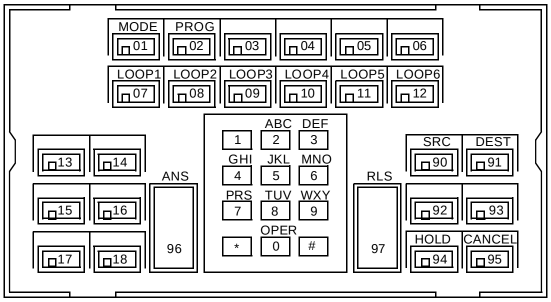
START	DESCRIPTION	DATA
CM08	Provide the system with the Name Display Service.	(1) 255 (2) 1◀ : To provide
	Specify the time to go back to Data and Time display after the call answered.	(1) 120 (2) 0 : 10 seconds later 1◀ : 6 seconds later
	Specify the duration to display the name.	(3) 121 (4) 0 : Until call finished 1◀ : As per CM08>120
CM20	Assign the access code for Name Display, used from individual stations.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (62) (2) A110
CM35	Assign a trunk name number to each trunk route.	• YY=03 (1) 00-63 : Trunk Route No. (2) 00-14 : Trunk Name No. 00-14 15◀ : Kind of trunk route assigned by CM35 YY=00 is displayed 16-63 : Trunk Name No. 16-63
CM77	Assign the desired station user name to each station number by CM77 Y=0 or Y=1.	• Y=0 By Character Code (1) X-XXXXXXXX: Station No. (2) Character Code: 20-7F See APPENDIX B: CHARACTER CODE TABLE (Max. 32 digits) • Y=1 By Character (1) X-XXXXXXXX: Station No. (2) A-Z, 0-9: Character (Max. 16 characters)
	Assign the desired trunk name to each trunk route by CM77 Y=2 or Y=3.	• Y=2 By Character Code (1) 00-14, 16-63: Trunk Name No. assigned by CM35 YY=03 (2) Character Code: 20-7F See APPENDIX B: CHARACTER CODE TABLE (Max. 8 digits) • Y=3 By Character (1) 00-14, 16-63: Trunk Name No. assigned by CM35 YY=03 (2) A-Z, 0-9: Character (Max. 4 characters)
END		

Attendant Call Selection

Programming

START

	DESCRIPTION	DATA
CM35	Specify the ATT call Selection key to which incoming calls from each trunk route terminate.	• YY=15 (1) 00-15: Trunk Route No. (2) ATT Call Selection Key: 00-07: C.O. Incoming Call 0-7 10-17: FX Incoming Call 0-7 20-27: WATS Incoming Call 0-7 30-37: CCSA Incoming Call 0-7 40-47: Tie Line Incoming Call 0-7
CM90	Assign the ATT Call Selection Keys required. The following ATT Call Selection Keys are initially set.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F60XX XX: 00-07 (C.O. Incoming Call 0-7) 10-17 (FX Incoming Call 0-7) 20-27 (WATS Incoming Call 0-7) 30-37 (CCSA Incoming Call 0-7) 40-47 (Tie Line Incoming Call 0-7) 50-53 (Special Operator Call 0-3) 54 (Priority Call 0) 55 (Priority Call 1) 56 (Emergency Call) 60 (Operator Call) 61 (Recall) 62 (Serial Call) 63 (Call Forwarding-No Answer) 64 (Call Forwarding-Busy Line) 65 (Call Forwarding-Intercept) 66 (Off Hook Alarm) 67 (Interposition Calling/Transfer)



Key No.	Data	Description
16	F6061	Recall
17	F6060	Operator Call
18	F6000	C.O. Incoming 0

END

Attendant Console Lockout-Password

Programming

START	DESCRIPTION	DATA
CM90	Assign the Mode key for providing Attendant Console Lockout on the ATTCON.	• YY=00 (1) ATTCON No. (E000-E007) + , + Key No. (2) F6110
CM20	Assign the access code for providing Attendant Console Lockout for an ATTCON, if required.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A155
CM08	Specify the buzzer sound when terminating an incoming call to the ATTCON in Attendant Console Lockout.	(1) 353 (2) 0 : Not provided 1◀ : To provide
CM60	Assign the password code for Attendant Console Lockout.	• YY=30 (1) 0 (2) XX-XX : Password Code (Max. 8 digits) X : 0-9, A (*) B (#) If no data is set, the default setting is NONE. In this case, the password is set to “12345678”.
END		

Attendant Do Not Disturb Setup and Cancel

Programming

START

	DESCRIPTION	DATA
CM13	Assign Do Not Disturb-System to the required stations.	• YY=00 (1) X-XXXXXXXX: Station No. (2) 0: To provide
CM90	Assign Do Not Disturb and Do Not Disturb Override function keys to each ATTCON/DESKCON, if needed. **Note:** *By resident system program, the Multi-Function keys are programmed to provide a Do Not Disturb Override key when the ATTCON calls a station in Do Not Disturb mode.*	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6102: Do Not Disturb F6108: Do Not Disturb Override F6104: Reset

END

Attendant Interposition Calling/Transfer

Programming

START

	DESCRIPTION	DATA
CM20	Assign the access code for Inter-Position Transfer.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A095
CM90	Assign the Attendant Call Selection Key for this feature on the ATTCON/DESKCON.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6067: Attendant Interposition Calling/Transfer
CM08	Specify the Inter-Position Transferred call to another tenant's Attendant Console. If the data is set to 1, a call from any station can be transferred to another Attendant Console regardless of Tenant Allocation by CM62.	(1) 143 (2) 0 : Restricted 1◀ : Allowed

END

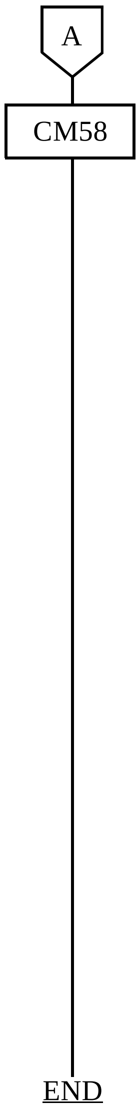
Attendant Listed Directory Number

Programming

START	DESCRIPTION	DATA
CM08	Provide the system with diversion display.	(1) 204 (2) 0: Available
CM35	Specify the Incoming Call Identification (ICI) key to which each LDN call or Tie Line call from each trunk route will terminate.	• YY=15 (1) 00-63: Trunk Route No. (2) 00-07: C.O. Incoming Call 0-7 40-47: Tie Line Incoming Call 0-7
CM90	Assign the required number of ICI key on the ATTCON/DESKCON.	• YY=00 (1) ATTCON No. + $\boxed{,}$ + Key No. (2) F60XX F6000-F6007: C.O. Incoming Call 0-7 F6040-F6047: Tie Line Incoming Call 0-7
CM50	Assign the indialed number to each LDN key or Tie Line key assigned by CM90. The indialed number should be different from any numbers assigned by CM10 and CM11.	• YY=01 For DID (1) 0 : Effective data in CM35 YY=15 1-8 : LDN Key 0-7 assigned by CM90 (2) X-XXXX: Indialed No. • YY=02 For Tie Line (1) 0 : Effective data in CM35 YY=15 1-8 : Tie Line Key 0-7 assigned by CM90 (2) X-XXXX: Indialed No.
END		

To provide the LDN Diversion feature, the following programming is also required.

START	DESCRIPTION	DATA
CM08	Provide the system with the LDN Diversion feature.	(1) 205 (2) 0: Available
CM58	Assign the data for LDN Diversion to each indialed number assigned by CM50 YY=01/02. **Note:** *A call is diverted to LDN0-7/TIE0-7 keys as specified by CM58 YY=02-07, even if CM50 YY=01/02>1-8 has been set.*	• YY=00 Tenant No. of LDN (1) 00 : Effective data in CM35 YY=15 01-08 : LDN Key 0-7 assigned by CM50 YY=01 10 : Effective data in CM35 YY=15 11-18 : Tie Line Key 0-7 assigned by CM50 YY=02 (2) 00-63: Tenant No. • YY=01 TAS Group No. (1) Same as CM58 YY=00 (2) 00-63: TAS Group No. assigned by CM44>13 • YY=02 Day Mode Destination of LDN (1) Same as CM58 YY=00 (2) 00-07: LDN/TIE key 0-7 08 : To TAS 09 : To the station/outside party assigned by CM58 YY=08 • YY=03 Night Mode Destination of LDN (1) Same as CM58 YY=00 (2) 00-07: LDN/TIE key 0-7 08 : To TAS 09 : To the station/outside party assigned by CM58 YY=09 • YY=04 Day Mode diversion for busy destination station (1) Same as CM58 YY=00 (2) 00: To Attendant Console (BUSY key) 08: To TAS 09: Camped on
A		



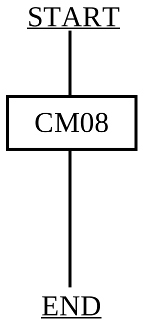
DESCRIPTION	DATA
	• YY=05 Night Mode diversion for busy destination station (1) Same as CM58 YY=00 (2) Same as CM58 YY=04
	• YY=06 Day Mode diversion for non-answering destination station (1) Same as CM58 YY=00 (2) 00: To Attendant Console (NANS key) 08: To TAS
	• YY=07 Night Mode diversion for non-answering destination station (1) Same as CM58 YY=00 (2) Same as CM58 YY=06
If a station is designated by CM58 YY=02, 03, assign the station number or abbreviated code for outside party to which the call is to be diverted.	• YY=08 Day Mode station number (1) Same as CM58 YY=00 (2) X-XXXXXXXX: Station No. CXX : Abbreviated code for outside party XX: 00-31 given by CM71>66
	• YY=09 Night Mode station number (1) Same as CM58 YY=00 (2) Same as CM58 YY=08

Hardware Required

AUC card or DIT card (DID Trunk)
ODT card (Tie Line Trunk)

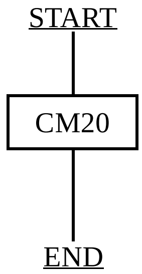
Attendant Loop Release

Programming



DESCRIPTION	DATA
Provide the system with the Attendant Loop Release feature.	(1) 014 : Attendant Loop Release (2) 0 : Available

To reenter the call that has been released from a loop before Automatic Recall:



DESCRIPTION	DATA
Assign the access code for Call Pickup - Direct.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX : Access Code (2) A021 : Call Pickup - Direct

Attendant Programming

Programming

START	DESCRIPTION	DATA
CM60	Assign the password code for Attendant Programming.	• YY=30 (1) 1 (2) XX-XX : Password (Max. 8 digits) X : 0-9, A (*), B(#) If no data is set, the default setting is NONE. In this case, the password is set to “12345678”.
CM90	Assign the program key for providing Attendant Programming on the ATTCON/ DESKCON.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6111
CM20	Assign the access code for providing Attendant Programming for the ATTCON/ DESKCON, if required.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A156
END		

Call Queuing

Programming

Refer to CALL WAITING DISPLAY on Page 45.

Call Splitting

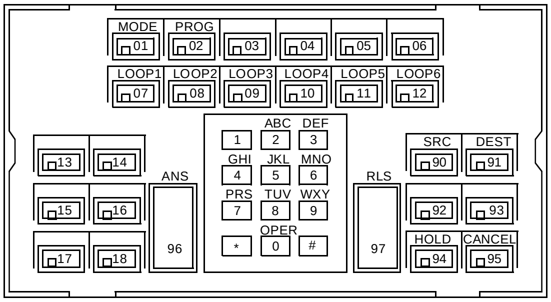
Programming

START

CM90

DESCRIPTION

Assign the SRC, DEST, TALK, and CANCEL keys on the ATTCON.
If no data is set, the default setting is as follows:



Key No.	Data	Description
06	F6203	Talk (TALK) **Note**
90	F6200	Source (SRC)
91	F6201	Destination (DEST)
95	F6202	Cancel (CANCEL)

Note: *TALK key is assigned as a Multi-Function key, during the answer state.*

DATA

- YY=00

(1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No.

(2) F6200: SRC
F6201: DEST
F6202: CANCEL
F6203: TALK

END

Call Waiting Display

Programming

START

	DESCRIPTION	DATA
CM42	Specify the number of waiting calls which cause the Call Waiting lamp to flash.	(1) 00 (2) 01-48: Number of Waiting calls If no data is set, the default setting is 06.

END

Common Route Indial

Programming

START

	DESCRIPTION	DATA
CM08	Provide the system with Diversion Display.	(1) 204 (2) 0: Available
CM90	Assign the required number of LDN keys on the ATTCON/DESKCON.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6000-F6007: LDN0-7
CM50	Assign the indialed number to each LDN key assigned by CM90. The indialed number should be different from any numbers assigned by CM10 and CM11.	• YY=01 (1) 1-8: LDN key 0-7 assigned by CM90 (2) X-XXXX: Indialed No.
CM51	Assign the destination to which a DID call is transferred when an unassigned number is dialed.	• YY=06 For DID Call (1) 00-63: Tenant No. (2) X-XXXXXXXX: Station No. E000 : ATTCON/DESKCON

END

To provide the LDN Diversion feature, the following programming is also required.

START	**DESCRIPTION**	**DATA**
CM08	Provide the system with the LDN Diversion feature.	(1) 205 (2) 0: Available
CM58	Assign the data for LDN Diversion to each indialed number assigned by CM50 YY=01.	• YY=00 Tenant No. of LDN (1) 01-08: LDN0-7 assigned by CM50 YY=01 (2) 00-63: Tenant No. • YY=01 TAS Group No. (1) Same as CM58 YY=00 (2) 00-63: TAS Group No.
	Note: *A call is diverted to LDN0-7 keys as specified by CM58 YY=02-07, even if CM50 YY=01>1-8 has been set.*	• YY=02 Day Mode destination of LDN (1) Same as CM58 YY=00 (2) 00-07: LDN0-7 key 08 : To TAS 09 : To the station/outside party assigned by CM58 YY=08 • YY=03 Night Mode destination of LDN (1) Same as CM58 YY=00 (2) 00-07: LDN0-7 key 08 : To TAS 09 : To the station/outside party assigned by CM58 YY=09 • YY=04 Day Mode diversion for busy destination station (1) Same as CM58 YY=00 (2) 00: To Attendant Console (BUSY key) 08: To TAS 09: Camped on
A		

A

CM58

DESCRIPTION	DATA
	• YY=05 Night Mode diversion for busy destination station (1) Same as CM58 YY=00 (2) Same as CM58 YY=04
	• YY=06 Day Mode diversion for non-answering destination station (1) Same as CM58 YY=00 (2) 00: To Attendant Console (NANS key) 08: To TAS
	• YY=07 Night Mode diversion for non-answering destination station (1) Same as CM58 YY=00 (2) Same as CM58 YY=06
If a station is designated by CM58 YY=02, 03, assign the station number to which the call is to be diverted.	• YY=08 Day Mode destination station (1) Same as CM58 YY=00 (2) X-XXXXXXXX: Station No.
	• YY=09 Night Mode destination station (1) Same as CM58 YY=00 (2) Same as CM58 YY=08

END

Hardware Required

AUC card or DIT card (DID Trunk)

Dialed Number Identification Service (DNIS)

Programming

START	DESCRIPTION	DATA
CM08	Provide the system with Diversion Display.	(1) 204 (2) 0: Available
CM35	Specify the Incoming Call Identification (ICI) key to which each LDN call or Tie Line call from each trunk route will terminate.	• YY=15 (1) 00-63: Trunk Route No. (2) 00-07: C.O. Incoming Call 0-7 40-47: Tie Line Incoming Call 0-7
CM90	Assign the required number of LDN keys on the ATTCON/DESKCON.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6000-F6007: C.O. Incoming Call 0-7 F6040-F6047: Tie Line Incoming Call 0-7
CM50	Assign the indialed number to each LDN key or Tie Line key assigned by CM90. The indialed number should be different from any numbers assigned by CM10 and CM11.	• YY=01 For DID (1) 0 : Effective data in CM35 YY=15 1-8 : LDN key 0-7 assigned by CM90 (2) X-XXXX: Indialed No. • YY=02 For Tie Line (1) 0 : Effective data in CM35 YY=15 1-8: Tie Line key 0-7 assigned by CM90 (2) X-XXXX: Indialed No.
CM58	Tenant number of the LDN assigned by CM50 YY=01.	• YY=00 (1) 00 : Effective data in CM35 YY=15 01-08 : LDN Key 0-7 assigned by CM90 (2) 00-63 : Tenant 00-63
END		

To provide the LDN Diversion feature, the following programming is also required.

START	DESCRIPTION	DATA
CM08	Provide the system with LDN Diversion feature.	(1) 205 (2) 0: Available
CM58	Assign the data for LDN Diversion to each indialed number assigned by CM50 YY=01. **Note:** *A call is diverted to LDN 0-7 keys as specified by CM58 YY=02, YY=03, even if CM50 YY=01/02>1-8 has been set.*	• YY=02 Day Mode Destination of LDN (1) 00 : Effective data in CM35 YY=15 01-08 : LDN key 0-7 assigned by CM90 10 : Effective data in CM35 YY=15 11-18 : Tie Line key 0-7 assigned by CM90 (2) 00-07: LDN/TIE key 0-7 • YY=03 Night Mode destination of LDN (1) Same as CM58 YY=02 (2) 00-07: LDN/TIE key 0-7 • YY=08 Day Mode destination station (1) Same as CM58 YY=02 (2) X-XXXXXXXX : Station No. CXX : Abbreviated code for outside party XX: 00-31 given by CM71>66 • YY=09 Night Mode destination station (1) Same as CM58 YY=02 (2) Same as CM58 YY=08
END		

Hardware Required

AUC card or DIT card (DID Trunk)
ODT card (Tie Line Trunk)

Incoming Call Identification

Programming

Refer to the following:
See SN610 ATTCON on Page 30
See SN716 DESKCON on Page 32
See ATTENDANT CALLED/CALLING NAME DISPLAY on Page 35
See ATTENDANT CALL SELECTION on Page 36
See ATTENDANT LISTED DIRECTORY NUMBER on Page 39
See COMMON ROUTE INDIAL on Page 45

Individual Trunk Access

Programming

START	DESCRIPTION	DATA
CM20	Assign the access code for Individual Trunk Access.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A081
CM30	Assign the Trunk identification code to each trunk. The Trunk ID code is to be dialed after the access code, and displayed on the Attendant Console.	• YY=19 (1) 000-255: Trunk No. assigned by CM10 (D000-D255) (2) XXXX: Trunk ID code **Note** Set any desired number (4 digit).
END		

Note: *By loading Resident System Program, Trunk Identification Codes are assigned as follows:*
1XXX
XXX: 000-255: Trunk Number

Multi-Function Key

Programming

START

DESCRIPTION | **DATA**

CM60

Provide each ATTCON/DESKCON Multi-Function key capability.

- YY=17

(1) 0-7: ATTCON No. assigned by CM10
(2) 1◀ : Effective

CM90

Assign the required Multi-Function keys to the each ATTCON/DESKCON.

Note 1: *The following data is assigned as initial data or resident data.*

Key No. / ATTCON Status No.	01	02	03	04	05	06
00	F6110 MODE	F6111 PROG				
01	F6112 SPB	F6113 LPB	F6106 SHF		F6105	F6203 TALK
02						F6107 BV
03						F6108 DDOV
04	F6100 RC	F6101 MW	F6102 DD	F6109 WW		F6104 RESET

Note 2: *When setting or canceling a group of stations in Do Not Disturb/Room Cut Off, ATTCON Status number 00 should be used.*

Note 3: *For the SN716 DESKCON Multi-Function key, do not assign the MODE key (F6110).*

Note 4: *Key No. 05-06 is not available for SN716 DESKCON.*

- YY=00

(1) EXX Y + $\boxed{,}$ + Multi-Function Key No. (01-06: ATTCON, 01-04: DESKCON)
XX: 00-04: ATTCON Status No.
00 : Idle State **Note 2**
01 : When answering or originating
02 : When called station is busy
03 : When called station is DND
04 : When accessing Hotel feature
Y : 0-7: ATTCON No.
(2) F6100: Room Cut Off
F6101: Message Waiting
F6102: Do Not Disturb
F6104: Reset
F6105: Serial Call Set
F6106: Flash over trunk
F6107: Busy Verification
F6108: Do Not Disturb Override
F6109: Wake Up
F6110: Mode **Note 3**
F6111: Programming
F6112: Out pulse (PB Signal) Short
F6113: Out pulse (PB Signal) Long
F6203: Talk

END

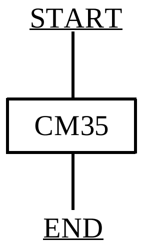
Multiple Console Operation

Programming

Refer to ATTENDANT CONSOLE (SN610 ATTCON) on Page 30 or ATTENDANT CONSOLE (SN716 DESKCON) on Page 32.

Pushbutton Calling-Attendant Only

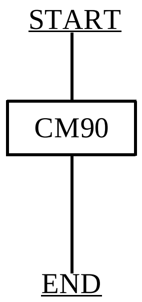
Programming



DESCRIPTION	DATA
Assign the type of signaling (DTMF) to Outgoing and Bothway Trunk Routes.	• YY=01 (1) 00-63: Trunk Route No. (2) 7◀

Serial Call

Programming



DESCRIPTION	DATA
Assign the SERIAL CALL SET and SERIAL CALL Keys on the ATTCON/DESKCON.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6062: Serial Call Termination F6105: Serial Call Set

Trunk Group Busy Display

Programming

START

	DESCRIPTION	DATA
CM30	Assign the trunk group number to each trunk. Several trunks may be assigned to one trunk group number.	• YY=09 (1) 000-255: Trunk No. (2) 01-62: Trunk Group No.
CM90	For providing the Trunk Group Busy Lamps on ATTCON assign the trunk group number to required key. **Note 1:** *A maximum of 6 keys per ATTCON can be assigned. Any six trunk group numbers out of trunk group numbers 01-62 can be assigned.* **Note 2:** *Key number 1-6 should not be assigned to provide a Trunk Group Busy Lamp.*	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F12XX XX: 01-62: Trunk Group No. assigned by CM30 YY=09
CM44	For providing external Trunk Group Busy Lamps, assign the trunk group number to the required circuit number on the DK card or circuit number of the external relay control on the MP card.	(1) XX Y XX : 00-31: DK Card No. E800-E831 assigned by CM10 Y : 0-3: Circuit No. 313 : Built-in DK on MP card (2) 11XX XX: 01-62: Trunk Group No. assigned by CM30 YY=09

END

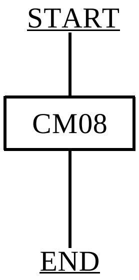
Hardware Required

To provide the Trunk Group Busy Lamps on Attendant Console:
ATTCON and DLC card

To provide the Trunk Group Busy Lamps externally:
DK card and lamp indicator provided by customer

Unsupervised Trunk-To-Trunk Transfer By Attendant

Programming



DESCRIPTION	DATA
Provide the system with this feature.	(1) 206 (2) 0 : Available 1◀ : Not available

Note: *The trunk associated with at least one side of the call must be programmed for answer and/or release signal(s) to ensure the trunks do not lock up.*
Refer to TRUNK-TO-TRUNK CONNECTION on Page 493 for data to be assigned to each trunk.

ATTENDANT DELAY ANNOUNCEMENT

Programming

START	DESCRIPTION	DATA
CM10	Assign a Digital Announcement Trunk card number to the required LEN. **Note:** *The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.*	(1) 000-763 : LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM 0/1 : EB002-EB031 For PIM 2/3 : EB032-EB063 For PIM 4/5 : EB064-EB095 For PIM 6/7 : EB096-EB127 **Note:** *EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.*
CM35	Allow the Announcement Service via Digital Announcement Trunk on Attendant Delay Announcement.	• YY=74 (1) 00-63 : Trunk Route No. (2) 0 : Allow
CM49	Assign the function of the Digital Announcement Trunk card.	• YY=00 (1) 000-001: Built-in DAT on MP card (2) 002-127: Digital Announcement Trunk Card No. assigned by CM10 (EB002-EB127) (3) 0F XX : Attendant Delay Announcement XX : 00-63 (Message No.) • YY=0A (1) 00-63 : Tenant No. (2) 00-63 : Message No. assigned by CM49 YY=00
A		

A

	DESCRIPTION	DATA
CM08	Specify the replay timer of the message recorded in the Digital Announcement Trunk.	(1) 165 (2) 0 : Replay at an interval assigned by CM41 Y=0>47 1◀ : Replay only once
CM20	To record, replay, and delete a message, assign the Digital Announcement Trunk access codes, respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX : Access Code (2) A100 : Record A101 : Replay A102 : Delete
CM41	Specify the unanswered timing of message replay.	• Y=0 (1) 16 (2) 01-30 : 4 sec.-120 sec. in 4-sec. increments If no data is set, the default setting is 32-36 seconds.
	Specify the interval time of message replay.	• Y=0 (1) 47 (2) 01-30 : 4 sec.-120 sec. in 4-sec. increments If no data is set, the default setting is 32-36 seconds.

END

Hardware Required

DAT card or MP card (built-in DAT)

ATTENDANT OVERFLOW

Programming

	DESCRIPTION	DATA
START		
CM08	Provide the system with Attendant Overflow.	(1) 067 (2) 0: Available
CM30	Assign the data for terminating system in Day/ Night Mode for each trunk.	• YY=02 Day Mode (1) 000-255: Trunk No. (2) 14: Termination to Attendant Console • YY=03 Night Mode (1) 000-255: Trunk No. (2) 04: Direct-in Termination 09: Automated Attendant **Note** • YY=05 Night Station Assignment (1) 000-255: Trunk No. (2) X-XXXXXXXX: Station No.
CM41	Specify the timing interval for ATTENDANT OVERFLOW.	• Y=0 (1) 01 (2) 01-30 : 4-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.
END		

Note: *Refer to AUTOMATED ATTENDANT when using the Automated Attendant as the Attendant Overflow destination (Page 66).*

To set a station or an outside party as the Attendant Overflow destination:

[Series 2300 (R4.1) software required]

START	DESCRIPTION	DATA
CM35	Provide Call Forwarding-All Calls on Attendant Overflow.	• YYY=173 (1) 00-63: Trunk Route No. (2) 0: Available
CM51	Assign the destination of Attendant Overflow to the incoming trunk tenant. For an outside number, assign the Virtual Line station number.	• YY=31 (1) 00-63: Incoming Trunk Tenant No. (2) X-XXXXXXXX: Station No. Virtual Line Station No. assigned by CM11
CM11	Assign the Virtual Line station number to the required Virtual LEN.	(1) 000-255: Virtual LEN (2) X-XXXXXXXX: Virtual Line Station No.
CM12	Assign Service Restriction Class A to the Virtual Line station.	• YY=02 (1) X-XXXXXXXX: Virtual Line Station No. assigned by CM11 (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Call Forwarding-All Calls-Outside in the Service Restriction Class A assigned by CM12 YY=02.	• YY=26 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀: Allow
CME6	Set Call Forwarding-All Calls-Outside to the Virtual Line station number assigned by CM11.	• YY=00 (1) X-XXXXXXXX: Virtual Line Station No. assigned by CM11 (2) Destination No.: X-XX + $\boxed{,}$ + YY...Y X-XX: Outgoing Trunk/LCR Group Access Code (1-2 digits) $\boxed{,}$: Separate Mark YY...Y: Called No. (Max. 26 digits)
A		

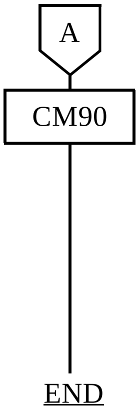
	DESCRIPTION	DATA
A		
CM35	To apply Call Forwarding-All Calls-Outside, set the trunk route combinations for Tandem Connection.	• YY=05 (1) 00-63: Trunk Route No. **Note** (2) 1◀: Release signal arrives **Note**
CM36	**Note:** *For Resident System Programming, refer to the Command Manual.*	• Y=0 (1) Incoming Trunk Route No. + Outgoing Trunk Route No. assigned by CM35 YY=05 (2) 0: Allow
END		

Note: *When a station or an outside party is set as the Attendant Overflow destination, the destination has priority over the Delay Announcement and Night station.*

ATTENDANT OVERRIDE

Programming

START	DESCRIPTION	DATA
CM08	Provide the system with ATTENDANT OVERRIDE.	(1) 012 (2) 1◀ : Available
	Specify the interval of the Warning Tone sent to the connected parties.	(1) 045 (2) 0 : Only once 1◀ : Every 4 seconds
	Specify whether the Warning Tone is sent to the outside party.	(1) 076 (2) 0 : To send 1◀ : Not sent
CM12	Assign Service Restriction Class A to each station.	• YY=02 (1) X-XXXXXXXX : Station No. (2) XX ZZ XX: 00-15◀ : Service Restriction Class A
CM15	Allow Attendant Override called side in the Service Restriction Class A assigned by CM12 YY=02.	• YY=09 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for Individual Trunk Access.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX : Access Code (2) A081 : Individual Trunk Access
CM30	Assign the Trunk Identification Code to each trunk. **Note:** *By loading the Resident System Program, Trunk Identification Codes are assigned as follows:* *1XXX* *XXX: 000-255 (Trunk number)*	• YY=19 (1) 000-255 : Trunk No. (2) XXXX : Trunk ID Code
A		



DESCRIPTION	DATA
Assign the Busy Verification key to ATTCON/DESKCON. **Note:** *By Resident System Program, one of the Multi-Function keys is assigned as a Busy Verification key (when receiving Busy Tone).*	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6107: Busy Verification

Note: *This feature cannot be used in conjunction with Attendant Lockout.*

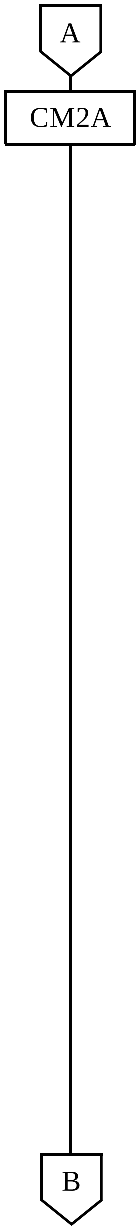
AUTHORIZATION CODE

Programming

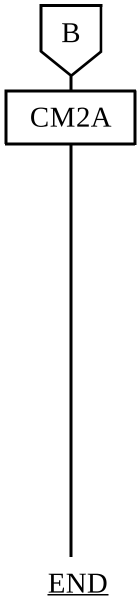
There are two kinds of processor for Authorization Code. One is the MP card, the other is the AP01 card. For the MP card, an EXPMEM card can be used to expand the number of codes.

(1) With MP card

START	DESCRIPTION	DATA
CM08	Designate the MP card for this feature.	(1) 216 : Processor for Authorization Code (2) 0 : MP card
	Specify whether Service Set Tone should be provided after dialing the access code for Authorization Code.	(1) 362 : Service Set Tone after dialing the access code (2) 0 : No tone 1◀ : Service Set Tone
CM12	Assign the Service Restriction Class A for Authorization Code to the required stations.	• YY=02 (1) X-XXXXXXXX : My Line No. (2) XX ZZ XX: 00-15◀ : Service Restriction Class A
CM15	Allow Authorization Code in the Service Restriction Class A assigned by CM12 YY=02.	• YY=31 Authorization Code (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for Authorization Code.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX : Access Code (2) A086 : Authorization Code
CM42	Specify the maximum number of digits for Authorization Code.	(1) 11 (2) Max. number of digits 01-16 : 1 digit-16 digits NONE◀ : 6 digits
A		



DESCRIPTION	DATA
Assign the ID Code Development number for Authorization Code.	• YY=A0 (1) 0: Authorization Code (2) 0-9: ID Code Development No. 00-09 **Note:** *CM2A YY=00-09 is determined by this data.*
Assign the ID Code for Authorization Code.	• YY=00-09 ID Code Development No. 00-09 (1) X-XX...XX (Max. 16 digits): ID Code for Authorization Code (2) 0000-2999: ID Code Pattern No.
Assign the purpose of ID Code.	• YY=10 (1) 0000-2999: ID Code Pattern No. (2) 0 : Validate the ID Code entered from stations and trunks 1 : Validate the ID Code entered from stations 3◀ : Invalidate the ID Code entered from stations and trunks
Assign the desired Trunk Restriction Class for each ID Code Pattern number.	• YY=11 (1) 0000-2999: ID Code Pattern No. (2) 1◀ : Unrestricted (RCA) 2 : Non-Restricted-1 (RCB) 3 : Non-Restricted-2 (RCC) 4 : Semi-Restricted-1 (RCD) 5 : Semi-Restricted-2 (RCE) 6 : Restricted-1 (RCF) 7 : Restricted-2 (RCG) 8 : Fully-Restricted (RCH)



DESCRIPTION	DATA
Assign the desired Service Restriction Class A to each ID Code Pattern number. The features available in each class are assigned by CM15.	• YY=12 (1) 0000-2999 : ID Code Pattern No. (2) 00-15◀ : Service Restriction Class A
Assign the desired Service Restriction Class B to each ID Code Pattern number. The features available in each class are assigned by CM15.	• YY=13 (1) 0000-2999 : ID Code Pattern No. (2) 00-15◀ : Service Restriction Class B
Assign the desired Service Restriction Class C to each ID Code.The features available in each class are assigned by CM15.	• YY=14 (1) 0000-2999 : ID Code Pattern No. (2) 00-15◀ : Service Restriction Class C

Note: *The following number of Authorization Codes including Forced Account Codes and DISA codes can be defined.*
MP without EXPMEM card: Approximately 1000 codes
MP with EXPMEM card: Approximately 3000 codes

The number of the codes varies with the number of digits assigned to each code. For details, refer to the Business/Hotel/Data Features and Specifications.

(2) With AP01 card

START	**DESCRIPTION**	**DATA**
CM05	Assign the AP number to the AP01 card. **Note:** *The AP number must match the SENSE switch setting on the AP01 card.* **INITIAL**	• Y=0 (1) 04-15 : AP No. (2) 07 : AP01 card
CM08	Designate the AP card for this feature.	(1) 216 : Processor for Authorization Code (2) 1◀ : AP (AP01)
	Specify whether Service Set Tone should be sent after dialing the access code for the Authorization Code.	(1) 362 : Service Set Tone after dialing the access code (2) 0 : No tone 1◀ : Service Set Tone
CM12	Assign the Service Restriction Class A for Authorization Code to required stations.	• YY=02 (1) X-XXXX : Station No. (2) XX ZZ XX : 00-15◀ : Service Restriction Class A
CM15	Allow Authorization Code in the Service Restriction Class A assigned by CM12 YY=02.	• YY=31 Authorization Code (1) 00-15 : Service Restriction Class A (2) 1◀ : Allow
CM20	Assign the access code for Authorization Code.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX : Access Code (2) A086 : Authorization Code
A		

	DESCRIPTION	DATA
A		
CM42	Specify the maximum number of digits for Authorization Code.	(1) 11 (2) Max. number of digits 01-10 : 1 digit-10 digits NONE◀ : 10 digits If Check Code is provided, the maximum number of digits is limited to 8.
CMD5	Specify the conditions for adding a Check Code to each Authorization Code. A Check Code consists of 2 digits. The first and second Check Code are automatically generated by the AP01 card according to the conditions specified by CMD5 Y=0 and CMD5 Y=1. Authorization Code: $\underbrace{X_1 X_2 X_3 X_4 X_5 X_6 X_7 X_8}_{\text{ID Code programmed}} \underbrace{C_1 C_2}_{\text{Check Code}}$	• Y=0 Significant digits for Check Code generation (1) 0 : For 1st Check Code 1 : For 2nd Check Code (2) 00 XX XX: 00 : No Check Code 01-FF : Random digits for generating Check Code (Enter desired value) If no Check Code is required, set data =0000 for both 1st and 2nd Check Code. • Y=1 Check Sum Data for generating Check Code (1) 0 : For 1st Check Code 1 : For 2nd Check Code (2) 0-9 : Check Sum Data (Enter desired value) If no Check Code is required, set data =0 to both 1st and 2nd Check Code.
B		

B	DESCRIPTION	DATA
CMD5	Set the Authorization Code and its temporary Service Class. By entering the Authorization Code, the Check Code will be displayed on the MAT or CAT.	• Y=3 (1) X-X...X: Authorization Code (Max. number of digits specified by CM42>11) (2) A BB CC DD EE A : Type of Temporary Service Class 0: Unrestricted 1: Fully-Restricted 2: As per BB CC DD EE 9: Delete the ID Code BB : 01-08: Trunk Restriction Class: assigned by CM35 YY=51-68 CC : 00-15: Service Restriction Class A assigned by CM12 YY=02 and CM15 DD: 00-15: Service Restriction Class B assigned by CM12 YY=02 and CM15 EE : 00-15: Service Restriction Class C assigned by CM12 YY=07 and CM15
	Assign the station number corresponding to each Authorization Code.	• Y=A (1) X-X...X: Authorization Code set by CM05 Y=3 (2) X-XXXX: Station No.
END		

Note 1: *Approximately 1,000 Authorization Codes, including Forced Account Codes and DISA codes, can be defined. The number of codes varies with the number of digits assigned to each code. For details, refer to the Business/Hotel/Data Features and Specifications.*

Note 2: *When deleting all ID codes stored in the AP01 card at one time, do the following operation:*

$\boxed{\text{ST}}$ + D60 + $\boxed{\text{DE}}$ + 0000 + $\boxed{\text{DE}}$ + CCC + $\boxed{\text{EXE}}$

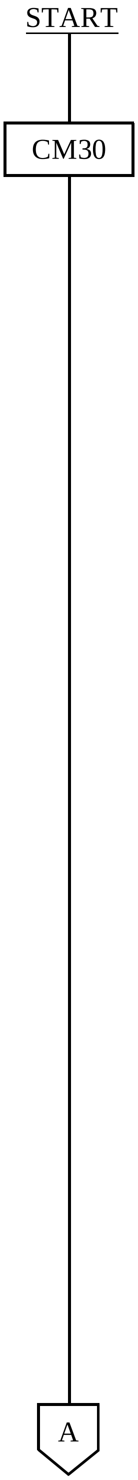
Note 3: *When providing Mask Data for Authorization Codes, assign CMD001>160-175. Refer to STATION MESSAGE DETAIL RECORDING (SMDR) on Page 433.*

Hardware Required

EXPMEM card on MP card or AP01 card if required

AUTOMATED ATTENDANT

Programming



DESCRIPTION

CM30 Assign the data for Automated Attendant to the required trunks.

Note: *When providing a Night Message for Automated Attendant, the second Answering Message which is assigned by CM49 YY=00 second data 02XX is used for the Night Message. In that case, the second data 08 of CM30 YY=30, 31 cannot be specified for handling of Busy/Not Available Automated Attendant destination.*

DATA

- YY=02 Terminating System in Day Mode
- YY=03 Terminating System in Night Mode
- YY=40 Terminating System in Mode A
- YY=41 Terminating System in Mode B

(1) 000-255 : Trunk No.
(2) 09 : Automated Attendant

- YY=30 Handling of busy/not available Automated Attendant destination in Day Mode
- YY=31 Handling of busy/not available Automated Attendant destination in Night Mode

(1) 000-255 : Trunk No.
(2) 00 : C.O. line release
01 : Forwarded to TAS indicator
03 : Forwarded to Attendant Console
04 : Forwarded to DIT Station
05 : Music and DT connection for Redial
06 : DT connection for redial
08 : 2nd Answering Message + DT connection for redial **Note**
15◀ : C.O. line release

- YY=32 Handling of timed-out Automated Attendant call in Day Mode
- YY=37 Handling of timed-out Automated Attendant call in Night Mode

(1) 000-255 : Trunk No.
(2) 00 : C.O. line release
01 : Forwarded to TAS indicator
03 : Forwarded to Attendant Console
04 : Forwarded to DIT station
06 : DT connection for redial
15◀ : C.O. line release

A

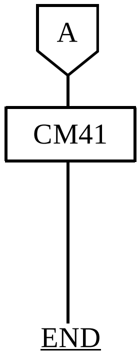
	DESCRIPTION	DATA
CM30		• YY=33 Handling of all PBR busy when YY=30, 31 is set to data 08 (1) 000-255: Trunk No. (2) 00 : C.O. line release 01 : Forwarded to TAS indicator 03 : Forwarded to Attendant Console 15◀ : C.O. line release
CM45	Assign the PB(DTMF) Receiver for only Automated Attendant, if desired.	• Y=2 (1) XX Z: PB Receiver No. XX : 00 (Built-in PBR on MP card) 01-15 (8RST Card No. assigned by CM10, E201-E215) Z : 0-3 (Circuit No.) (2) 0 : Only for Automated Attendant
CM63	Specify whether inter-tenant connection is allowed on an Automated Attendant incoming call.	• Y=2 (1) XX ZZ XX: 00-63 (Tenant No. of called station) ZZ : 00-63 (Tenant No. of trunk) (2) 0 : Restricted 1◀ : Allowed
CM64	Assign the answering method for the Automated Attendant, to the required tenants.	• Y=0 (1) 00-63: Tenant No. (2) 00 : DT Connection 01 : Hold Tone on MP card + DT Connection 02 : 1st Answering Message + DT Connection 03◀ : DT Connection
	For providing a Night Message, assign the answering method of Night Mode, to the required tenants.	• Y=2 (1) 00-63: Tenant No. (2) 00 : DT Connection 01 : Hold Tone on MP card + DT Connection 02 : Night Message assigned by CM49 YY=00, 02XX 03◀ : According to the data set by CM64 Y=0

B

	DESCRIPTION	DATA
B		
CM48	Specify whether no Dial Tone connection is required for the answering method assigned by CM64 Y=0.	• Y=2 (1) 06 (2) 0 : No Dial Tone 1◀ : Dial Tone
CM08	Specify the ringing cadence for an Automated Attendant call.	(1) 180 (2) 0 : 0.4 seconds ON-0.2 seconds OFF 0.4 seconds ON-2 seconds OFF 1◀ : As per CM35 YY=33
	Specify the process when a call is transferred by an Automated Attendant to a predetermined station and time-out occurs.	(1) 359 (2) 0 : Disconnect the call 1◀ : Continue to call
	Specify the process for an Automated Attendant call when a caller dials while receiving the message or music.	(1) 363 (2) 0 : Not allowed (Allowed after receiving the message or music) 1◀ : Allowed
CM41	Specify the time before answering by Automated Attendant.	• Y=0 (1) 59 (2) 00-08: 0 sec.-32 sec. in 4 sec. increments If no data is set, the default setting is 4-8 seconds.
	Specify the time before an Automated Attendant call is redirected because no digits are received from the calling party.	• Y=0 (1) 34 (2) 01-30: 4 sec.-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.
	Specify the timing of unanswered call after forwarding to predetermined station in Automated Attendant.	• Y=0 (1) 39 (2) 01-30: 4 sec.-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.
END	Specify the time before Dial Tone time-out in Automated Attendant.	• Y=0 (1) 43 (2) 01-14: 1sec.-14 sec. in 1 sec. increment If no data is set, the default setting is 14 seconds.

When the first and/or the second answering message is required: CM30 YY=30, 31>second data 08, CM64 Y=0>2nd data 02, or Night Message is required: CM64 Y=2>2nd data 02, do the following programming.

START	DESCRIPTION	DATA
CM10	Assign the Digital Announcement Trunk card number to the required LEN. **Note:** *The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.*	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM 0/1 : EB002-EB031 For PIM 2/3 : EB032-EB063 For PIM 4/5 : EB064-EB095 For PIM 6/7 : EB096-EB127 **Note:** *EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.*
CM49	Assign the function of the Digital Announcement Trunk.	• YY=00 (1) 000-001 : Built-in DAT on MP card (2) 002-127 : Digital Announcement Trunk Card No. assigned by CM10 (3) 01XX : 1st Answering Message 02XX : 2nd Answering Message/ Night Message XX : 00-63 (Message No.)
	Assign the Message number to the required tenants.	• YY=01 For 1st Answering Message • YY=02 For 2nd Answering Message/ Night Message (1) 00-63 : Tenant No. (2) 00-63 : Message No. assigned by CM49 YY=00
CM20	To record, replay, or delete a message, assign the respective Digital Announcement Trunk access codes.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX : Access Code (2) A100 : Record A101 : Replay A102 : Delete
A		



DESCRIPTION	DATA
Specify the message replay timer for Automated Attendant.	• Y=0 (1) 51 (2) 01-15: 4-60 sec. in 4 sec. increments If no data is set, the default setting is 40 seconds.

Hardware Required

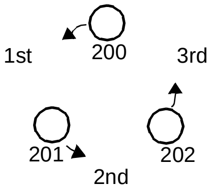
For providing the first and/or second Answering Message/Night Message:
DAT card or MP card (built-in DAT)

AUTOMATIC CALL DISTRIBUTION (ACD)

Automatic Call Distribution (ACD) With Management Information System (MIS)

Note: *Additional programming is required for MIS, once ACD has been programmed. Refer to the CallCenterWorX System Manual. If using CallCenterWorX, station numbers may have a maximum of 4 digits.*

Programming

START	DESCRIPTION	DATA
CM17	For each ACD group, assign station numbers, one by one, in the order of hunting. **Note:** *Up to 60 stations can be assigned into a single ACD group.* **Example:** *For setting station numbers 200, 201, 202 into one ACD group.* 1st Operation (1) 200 (2) 201 2nd Operation (1) 201 (2) 202 3rd Operation (1) 202 (2) 200 	• Y=0 (1) X-XXXXXXXX: Station No. (2) X-XXXXXXXX: Another station number to be linked
	Assign the Pilot station and Member station. **Note:** *Pilot station must be a non-equipped LEN (CM10) phantom.*	• Y=1 (1) X-XXXXXXXX: ACD station No. (2) 1 : Pilot station 0◀ : Member station
	Assign the ACD group number.	• Y=2 (1) X-XXXXXXXX: ACD station number (2) 00-15: ACD Group 00-15
	Specify ACD service for each type of call.	• Y=4 Internal Call (1) X-XXXXXXXX: Pilot station number of ACD group (2) 0 : Not provided 1◀ : To provide
A		

A

	DESCRIPTION	DATA
CM17		• Y=5 C.O. (DDD/FX/WATS) Incoming Call (1) X-XXXXXXXX: Pilot Station No. of ACD group (2) 0 : Not provided 1◀ : To provide • Y=6 Tie Line Incoming Call (1) X-XXXXXXXX: Pilot Station No. of ACD group (2) 0 : Not provided 1◀ : To provide • Y=7 DID/Automated Attendant Call (1) X-XXXXXXXX: Pilot Station No. of ACD group (2) 0 : Not provided 1◀ : To provide • Y=B Designation of number of queuing in each ACD group (1) X-XXXXXXXX: Pilot Station No. of ACD group (2) 0 : To provide (See CM42>16) 1◀ : Not provided
CM42	Specify the maximum number of queuing in each ACD group.	(1) 16 (2) 01-99: Number of queuing in each ACD group
CM41	Specify the basic call answer delay time for use in PEG Count analysis.	• Y=0 (1) 16 (2) 01-30: 4-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.
CM20	Assign the access code for ACD Station Busy Out Set and Reset.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A044: Busy Out Set A045: Busy Out Reset

B

B	**DESCRIPTION**	**DATA**
CM90	Assign the ACD Busy Out key on the D^{term}, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0044: ACD Busy Out
	Assign the Release key on the D^{term}, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F1020: Release
CM08	Specify the processing for an incoming call when all ACD stations are busy.	(1) 212 (2) 0 : Busy Tone Connection 1◀ : Queuing
	Specify the processing for a held call after the agent sets the ACD Busy Out.	(1) 214 : For the held call from Tie Line (2) 0 : Reconnected by Switch Hook Flash 1◀ : Disconnected (1) 215 : For the held call from C.O. Line (2) 0 : Reconnected by Switch Hook Flash 1◀ : Disconnected
	Specify whether the transferred C.O. call from a station or an attendant is placed into queuing mode when all ACD stations are busy. **Note:** *This data is only effective when CM08>212 is set to 1.*	(1) 227 (2) 0 : The call is placed into queuing mode **Note** 1◀ : Recall to the transferring station when the call is transferred from a station, or attendant Camp-On is set when the call is transferred from Attendant
	Enable the ACD Busy Out set and reset from the secondary extension.	(1) 442 (2) 0 : Available 1◀ : Not available
END		

To provide DID Number Conversion for an ACD Group, see DID DIGIT CONVERSION on Page 225-1.

Busy In / Busy Out - ACD

Programming

To provide ACD Busy Out indication on DSS Console:

	DESCRIPTION	DATA
START		
CM08	Provide the system with ACD Busy Out indication on DSS Console.	(1) 265 (2) 0: To provide
CM97	Assign the function key on each DSS Console.	(1) DSS Console No. (00-31) + $\boxed{,}$ + Function Key No. (57-59) (2) F1055 : ACD Busy Out
END		

Call Waiting Indication - ACD

Programming

To provide Call Waiting (CW) LEDs on the D^{term}:

START

	DESCRIPTION	DATA
CM08	Assign the incoming call to queuing mode when all ACD stations are busy.	(1) 212 (2) 1◀ : Queuing
CM42	Specify the maximum number of queuing in each ACD group for controlling call waiting lamp of a D^{term}.	(1) 15 (2) 01-99: Number of queuing in each ACD group If no data is set, the default setting is 01.

Note: *Depending on the number of queuing station/trunk, lamp indication pattern on a D^{term} is different as shown below:*

N=Number of queuing station/trunk

CONDITIONS	LAMP INDICATION
2nd Data=01	Steady on red irrespective of number of queuing station/ trunk
1 ≤ N < 2nd Data (2nd Data ≠ 01)	Steady on red
2nd Data ≤ N (2nd Data ≠ 01)	Flashing red

	DESCRIPTION	DATA
CM90	Assign the ACD Call Waiting Indication LED to the required D^{term}, as required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F1280-F1295: ACD Group 0-15

END

To provide an external Call Waiting Indicator:

START	DESCRIPTION	DATA
CM08	Assign the incoming call to queuing mode when all ACD stations are busy.	(1) 212 (2) 1◀ : Queuing
CM42	Specify the maximum number of queuing in each ACD group for controlling external indicator lamp.	(1) 15 (2) 01-99: Number of queuing in each ACD group If no data is set, the default setting is 01.

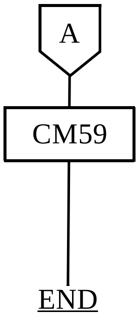
Note: *Depending on the number of queuing station/trunk, lamp indication pattern on the external indicator is different as shown below:*

N=Number of queuing station/trunk

CONDITIONS	LAMP INDICATION
2nd Data=01	Lamp on irrespective of number of queuing station/trunk (For the indication pattern, see CM59.)
N < 2nd Data (2nd Data ≠ 01)	Lamp off
2nd Data ≤ N (2nd Data ≠ 01)	Lamp on (For the indication pattern, see CM59.)

START	DESCRIPTION	DATA
CM10	Assign the DK card to the required LEN. **Note:** *The DK card number must be assigned to the first LEN (Level 0) and third LEN (Level 2) of each LT slot.*	(1) 000-763: LEN (2) E800-E831: DK card No. For PIM 0/1: E800-E807 For PIM 2/3: E808-E815 For PIM 4/5: E816-E823 For PIM 6/7: E824-E831 **Note:** *Circuit No. 3 of E831 is used for built-in External Equipment Interface on MP card by setting CM44.*
CM44	Set the function of ACD Calling Waiting Indication to the DK.	(1) XX Y XX: 00-31: Card No. assigned by CM10 (E800-E831) Y : 0-3: Circuit No. 313: Built-in External Equipment Interface on MP card (2) 14XX XX: 00-15: ACD Group No. assigned by CM17

A



DESCRIPTION	DATA
Specify the external ACD Call Waiting indication pattern.	(1) 00 (2) 01 : 30 IPM (1 sec. ON/OFF) 02 : 60 IPM (0.5 sec. ON/OFF) 03 : 120 IPM (0.25 sec. ON/OFF) 07 : Steady on NONE◀ : 120 IPM (0.25 sec. ON/OFF)

Delay Announcement - ACD

Programming

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A for Digital Announcement Trunk Access (Record/Replay/Delete) to the required station.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XXZZ XX: 00-15◀ : Service Restriction Class A
CM15	Assign Digital Announcement Trunk Access in the Service Restriction Class A assigned by CM12 YY=02.	• YY=33 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM10	Assign the Digital Announcement Trunk card number to the required LEN. **Note:** *The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.*	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM 0/1 : EB002-EB031 For PIM 2/3 : EB032-EB063 For PIM 4/5 : EB064-EB095 For PIM 6/7 : EB096-EB127 **Note:** *EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.*
CM17	Specify the pattern of message sent to each ACD group periodically.	• Y=A (1) X-XXXXXXXX: Pilot Station No. of ACD group (2) 0: To send periodically
CM41	If the data for CMl7 Y=A is “0,” set the interval time for ACD Delay Announcement.	• Y=0 (1) 47 (2) 01-30: 4-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 sec.
	Specify the maximum ACD call waiting time before answer or abandonment for ACD PEG Count, and waiting time before ACD Delay Announcement.	• Y=0 (1) 16 (2) 01-30: 4-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 sec.
A		

A	DESCRIPTION	DATA
CM49	Assign the ACD Delay Announcement function to the required Digital Announcement Trunk.	• YY=00 (1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk Card (EB002-EB127) No. assigned by CM10 (2) 0B0XX XX: 00-15: ACD Group No.
CM51	When transferring the call to a station or Attendant after the first interval time of ACD Delay Announcement, assign the destination. **Note:** *This is a separate feature called "Delay Overflow". ACD Delay Announcement is required in order for this feature to work.*	• YY=17 (1) 00-63: Tenant No. (2) Destination: X-XXXXXXXX: Station No. E000 : Attendant Console
CM20	To record, replay and delete a message, assign the Digital Announcement Trunk access code, respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access code (2) A100: Record A101: Replay A102: Delete
CM08	Specify a diversion display on a D^{term} or Attendant Console when transferring an ACD call.	(1) 357 (2) 0 : Available 1◀ : Not available
END		

When sending the ACD second delay announcement:

START

	DESCRIPTION	**DATA**
CM08	Provide the system with Busy Tone Connection for processing when all ACD stations are busy.	(1) 212 (2) 0: Busy Tone Connection
CM10	Assign the Digital Announcement Trunk card number to the required LEN. **Note:** *The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.*	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM 0/1: EB002-EB031 For PIM 2/3: EB032-EB063 For PIM 4/5: EB064-EB095 For PIM 6/7: EB096-EB127 **Note:** *EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.*
CM17	Specify the pattern of message sent to each ACD group periodically.	• Y=A (1) X-XXXXXXXX: Pilot station number of ACD group (2) 0: To send periodically

A

	DESCRIPTION	DATA
A		
CM41	Set the interval time of ACD Delay Announcement.	• Y=0 (1) 47 (2) 01-30: 4-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 sec.
	Specify the maximum ACD call waiting time for ACD PEG Count, and waiting time before ACD Delay Announcement.	• Y=0 (1) 16 (2) 01-30: 4-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.
CM49	Assign the ACD Delay Announcement function and the ACD Second Delay Announcement function to the required Digital Announcement Trunk.	• YY=00 (1) 000-001 : Built-in DAT on MP card (2) 002-127 : Digital Announcement Trunk Card No. assigned by CM10 (3) 11XX : ACD Second Delay Announcement XX : 00-15: ACD Group No.
END		

Hunt Past No Answer - ACD

Programming

Refer to CALL FORWARDING - NO ANSWER on Page 105.

Immediate Overflow - ACD

Programming

Refer to CALL FORWARDING - BUSY LINE on Page 103.

Priority Queuing - ACD

Programming

START

	DESCRIPTION	DATA
CM35	Assign Priority Queuing per trunk route.	• YY=60 (1) 00-63: Trunk Route No. (2) 0: Provided 1◀ : Not provided
CM76	Assign Priority Queuing per DID incoming LDN, if Digit Conversion is provided (CM35 YY=18 is set to 0).	• YY=11 (1) 000-999: Number Conversion Block No. assigned by CM76 YY=00/90 (2) 0: Not provided 1◀ : To provide

END

Queue Size Control - ACD

Programming

Refer to AUTOMATIC CALL DISTRIBUTION (ACD) on Page 71.

Silent Monitor - ACD

Programming

To monitor an ACD call, with or without warning tone:

Note: *The use of monitoring, recording, or listening devices to eavesdrop, monitor, retrieve, or record telephone conversations or other sound activities, whether or not contemporaneous with its transmission, may be illegal in certain circumstances under federal or state laws. Legal advice should be sought prior to implementing any practice that monitors or records any telephone conversation. Some federal and state laws require some form of notification to all parties to the telephone conversation, such as using a beep tone or other notification methods or require the consent of all parties to the telephone conversation, prior to monitoring or recording a telephone conversation. Some of these laws incorporate strict penalties.*

START	DESCRIPTION	DATA
CM08	Specify whether warning tone is sent to connected parties in two-way calling when monitoring.	(1) 259 (2) 0 : No tone 1◀ : One warning tone
CM12	Assign the Service Restriction Class A for monitoring stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow monitoring in the Service Restriction Class A assigned by CM12 YY=02.	• YYY=103 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM12	Assign the Service Restriction Class A for monitored stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow being monitored in the Service Restriction Class A assigned by CM12 YY=02.	• YYY=104 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for monitoring, if required.	• Y=0-3 Number Plan Group 0-3 (1) X-XXXX : Access Code (2) A033 : Monitor
CM90	Assign a monitoring function key to the D^{term}, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0033: Monitoring
END		

Hardware Required

To provide the delay announcement for ACD:
DAT card or MP card (built-in DAT)

To provide the external Call Waiting Indicator:
DK card or MP card (built-in External Equipment Interface)
External Indicator

Requirement for External Indicator:
Control Method: Ground/Battery (Maximum 125 mA)
Type: Visual and/or Audible type with volume control

AUTOMATIC CAMP-ON

Programming

START

	DESCRIPTION	DATA
CM08	Specify the Camp-On Tone pattern.	(1) 068 (2) 0 : Send out only once 1◀ : Repeat at 4 second intervals
CM30	Assign Automatic Camp-On to the required DIT trunks.	• YY=13 In Day Mode • YY=14 In Night Mode (1) 000-255 : Trunk No. (2) 06 : Automatic Camp-On

END

AUTOMATIC NUMBER IDENTIFICATION (ANI)

Programming

1. DTI Assignment for ANI

	DESCRIPTION	DATA
START		
CM30	Assign a trunk route number to each DTI.	• YY=00 (1) 000-255 : Trunk No. (2) 00-63 : Trunk Route No.
	Specify the Terminating System in Day Mode, Night Mode, Mode A and Mode B for incoming calls.	• YY=02 Day Mode • YY=03 Night Mode • YY=40 Mode A • YY=41 Mode B (1) 000-255 : Trunk No. (2) 31◀ : DID, Tie line and any call which is not handled by the PBX
CM35	Assign the trunk route data to each DTI route.	• YY=00 Kind of trunk route (1) 00-63 : Trunk Route No. (2) 00 : DDD (C.O./DID), ISDN trunk
		• YY=04 Answer signal from distant office (1) 00-63 : Trunk Route No. (2) 2 : Answer signal arrives
		• YY=05 Release signal from distant office (1) 00-63 : Trunk Route No. (2) 1◀ : Release signal arrives
		• YY=09 Incoming connection signaling (1) 00-63 : Trunk Route No. (2) 03 : Wink Start
		• YY=10 2nd DT sending on call termination (1) 00-63 : Trunk Route No. (2) 0 : Second Dial Tone is not sent.
A		

DESCRIPTION | **DATA**

A

CM35

CONNECTION PATTERNS	PAD DATA OF DTI (dB)			
	DATA =4(T/R)	DATA =5(T/R)	DATA =6(T/R)	DATA =7(T/R)
Station-DTI	-3/-8	-3/-3	-3/-3	-3/-8
Tone-DTI	0/0	0/0	0/0	0/0
COT/LDT-DTI	0/0	0/0	0/0	0/0
ODT-DTI	+3/-3	0/0	0/0	+3/-3
DTI-DTI	0/-6	0/0	0/-6	0/0

T/R : Transmitter PAD/Receiver PAD
+ : Gain
- : Loss

- YY=19 DTI Pad

(1) 00-63 : Trunk Route No.
(2) 0-3 : Programmable PAD (See CM42)
4-7◀ : Fixed PAD (See left table)

- YY=20 Sender Start Condition

(1) 00-63 : Trunk Route No.
(2) 00 : Wink Start

Assign calling number sending method from the network to each trunk route.

- YYY=129 Calling No. Sending Method

(1) 00-63 : Trunk Route No.
(2) 0 : Caller ID (Class SM)
1 : T1-ANI

END

2. MF Signaling Assignment

START	DESCRIPTION	DATA
CM05	Assign an AP number to MF Receiver Trunk. **INITIAL** **Note:** *The SENSE switch on the MF Receiver Trunk gives the AP number.*	• Y=0 (1) 04-15, 20-31: AP No. (2) 08: MF Receiver Trunk (4RSTB card)
CM06	Assign MF Receiver Trunk number to each MF Receiver Trunk. **INITIAL**	• YY=04 (1) 00-15 : MF Receiver Trunk No. (2) XX Z XX : AP No. assigned by CM05 Z : 0-3: Circuit No.
CM09	Provide system with MF Signaling. **INITIAL**	(1) 52 : MF Signaling (2) 0◀ : To provide
CMAA	Assign calling number sending method from the network to the AP number of MF Receiver Trunk.	• YY=07 (1) 04-15, 20-31: AP No. assigned by CM05 (2) 0 : Caller ID (Class SM) 1 : T1-ANI
CM35	Provide required DID trunk route with MF Signaling.	• YY=37 MF Signaling Assignment (1) 00-63 : Trunk Route No. (2) 0 : Available
CM31	Assign MF PAD control level to the incoming signal.	• Y=1 (1) 0 : MF PAD Control level (2) 0 : –8.0 dBm 1 : –10.0 dBm 2 : –11.5 dBm 3 : –9.13 dBm 4-7◀ : Not used
A		

	DESCRIPTION	DATA
A		
CM31	Assign MF Receiver sensitive level. **INITIAL**	• Y=1 (1) 1: MF Receiver Sensitive level (2) 00-14: –21 dBm- –35 dBm 15◀ : –36 dBm (–1 dBm increments)
	Assign MF Receiver to each circuit number (0-3) of the MF Receiver Trunk. **INITIAL**	• Y=2 (1) 0-3 : AP No. **Note** (2) 3◀ : All circuits assigned as Receiver **Note:** *AP numbers 0-3 correspond to the AP numbers assigned by CM05 (04-15, 20-31):* *CM31 Y=2* — *CM05 Y=0* *AP Number 0:* *AP Number X* *AP Number 1:* *AP Number Y* *AP Number 2:* *AP Number Z* *AP Number 3:* *AP Number W* *(X < Y < Z < W)*
	Assign supervisory timer of inter-digit pause on incoming signal.	• Y=B (1) 05 : Supervisory Timer of Inter-digit Pause on Incoming Signal (2) NONE◀ : 24 seconds 01-31 : 1 seconds -31 seconds
CM35	Assign Busy/Idle information not to be sent to T1 network.	• YY=48 Busy/Idle Sending to T1 Network (1) 00-63 : Trunk Route No. (2) 0 : Not available
END		

3. ANI Assignment

START

	DESCRIPTION	DATA
CM08	Assign requiring of ANI Signal from T1 network when an incoming call terminates.	(1) 472 (2) 0: Available
CM31	Assign the Signal Pattern received from T1 network. **INITIAL** • When the Signal Pattern from T1 network is FGD-Format: Assign the data to “NONE”. • When the Signal Pattern from T1 network is ANI-Format: Assign the data to “02”. **Note**	• Y=3 (1) 00: Signal Pattern from T1 Network (2) NONE◀: ANI + Called No. 02 : ANI
	Assign the number of digits of Called Number received from T1 network. **INITIAL**	• Y=1 (1) 2: Number of Digits of Called No. (2) NONE◀: No data 01-31 : 1-31 digits
	Assign the signal kind of Called Number sent from T1 network. **Note:** *When the Signal Pattern from T1 network is FGD-Format: Assign the data to “1”.* *When the Signal Pattern from T1 network is ANI-Format: Assign the data to “0”.*	• Y=A (1) 17: Signal Kind of Called No. **Note** (2) 0 : DP 1◀ : DTMF
	Assign the ACK-WINK Signal to be sent to the DTI when the signal kind of Called Number received from T1 network is MF Signal. **Note:** *When the Signal Pattern from T1 network is FGD-Format: Assign the data to “0”.* *When the Signal Pattern from T1 network is ANI-Format: Assign the data to “1”.*	• Y=A (1) 16: Sending of ACK-WINK Signal on Receiving MF Signal **Note** (2) 0 : To send 1◀ : Not sent

A

A

DESCRIPTION | **DATA**

CM31

Assign the ACK-WINK Signal to be sent to the DTI when the signal kind of called number received from T1 network is DP Signal.

Note: *When the Signal Pattern from T1 network is FGD-Format: Assign the data to “1”.*

When the Signal Pattern from T1 network is ANI-Format: Assign the data to “0”.

- Y=A

(1) 18 : Sending of ACK-WINK Signal on Receiving DP Signal **Note**
(2) 0 : To send
1◀ : Not sent

Assign the number of digits of ANI received from T1 network. **INITIAL**

- Y=1

(1) 3 : ANI Digits from T1 Network
(2) NONE◀ : No data
01-31 : 1-31 digits

Assign the number of digits to be deleted from ANI, if required.
An example of FGD Format:

Received digits:
Key Pulse + XX + 1234567890 + Stop Pulse
ANI (10 digits)
Information digits (2 digits)
↓
- 2 digits deletion
- Identification on the terminal: 10 digits (ANI)

- Y=A

(1) 14 : Number of Deleting Digits from ANI
(2) NONE◀ : No digit deletion
00 : No digit deletion
01-10 : Leading one digit deletion- Leading 10 digits deletion

CM08

Assign whether ANI is sent to the OAI terminal or not.

(1) 462 : Sending ANI to OAI terminal
(2) 0 : To send
1◀ : Not sent

Assign whether ANI is sent to the SMDR terminal or not.

(1) 463 : Sending ANI to SMDR terminal
(2) 0 : To send
1◀ : Not sent

END

When the signal pattern of the called number sent from T1 network is as shown below, assign the following data, if required.

Called Number =NPA + NNX + Called Station Number

START	DESCRIPTION	DATA
CM35	Assign the Digit Addition/Deletion on the incoming calls.	• Y=17 Digit Addition/Deletion Assignment (1) 00-63: Trunk Route No. (2) 00-09: "0" add -"9" add 10 : 2-digit addition (CM50 YY=00 > 0) 11 : 1 digit deletion 12 : 2 digits deletion 15◀ : Addition/deletion is not performed
CM20	Assign the access code for LCR Group 0-3.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A126: LCR Group 0 A127: LCR Group 1 A128: LCR Group 2 A129: LCR Group 3
CM8A	Assign an area code for Intra-Office Termination.	• YYYY=4005-4007 Area Code Development No. 5-7 (1) X-XXXXXXXX: Area Code, 1-8 digits (2) 8000: Intra-Office Termination
END		

Note: *FGD-Format and ANI-Format are:*

SIGNAL PATTERN	CALLED NUMBER	ANI
FGD-Format	MF Signal	MF Signal
ANI-Format	DP Signal	MF Signal

Hardware Required

DTI card

MFR card

AUTOMATIC RECALL

Programming

START

	DESCRIPTION	DATA
CM41	Specify the timing for AUTOMATIC RECALL. If no data is set, the following timing will be applied: Attendant Recall : 31.2-33.6 seconds Non Exclusive Hold : 60-64 seconds Exclusive Hold : 236-240 seconds Transfer Recall : 24-28 seconds Attendant Hold Recall : 31.2-33.6 seconds Camp-On Recall : 24-32 seconds	• Y=0 (1) 00: Attendant Recall (2) 01-14: 2.4-33.6 sec. (2.4 sec. increments) 15-24: 38.4-124.8 sec. (9.6 sec. increments) (1) 05: Non Exclusive Hold (2) 01-98: 4-392 sec. (4 sec. increments) 99 : Recall is not performed (1) 06: Exclusive Hold (2) 01-98: 4-392 sec. (4 sec. increments) 99 : Recall is not performed (1) 07: Transfer Recall (2) 01-30: 4-120 sec. (4 sec. increments) (1) 11: Attendant Hold Recall (2) 01-14: 2.4-33.6 sec. (2.4 sec. increments) 15-24 : 38.4-124.8 sec. (9.6 sec. increments) (1) 26: Camp-On Recall (2) 01-15: 16-128 sec. (8 sec. increments)

END

BACKGROUND MUSIC

Programming

START	DESCRIPTION	DATA
CM10	Assign BGM Interface trunks (COT card/TNT card) to the required LEN. **Note:** *The TNT trunk number must be assigned to the first LEN (Level 0) and the third LEN (Level 2) of each LT slot.*	(1) 000-763 : LEN (2) D000-D255 : COT/TNT Trunk No.
CM12	Assign the Service Restriction Class A to the required D^{term}s.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15◀ : Service Restriction Class A
CM15	Allow Background Music on D^{term} in the Service Restriction Class A assigned by CM12 YY=02.	• YY=32 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for this feature.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX : Access code (66) (2) A039 : BGM on D^{term}
CM30	Assign a trunk route number to the BGM Interface trunk (COT card/TNT card).	• YY=00 (1) 000-255 : Trunk No. (2) 00-63 : Trunk Route No.
CM35	Assign the BGM interface to each trunk route.	• YY=00 (1) 00-63 : Trunk Route No. (2) 05 : Interface with BGM Tone Source
CM48	Assign a BGM program number to each trunk number connected to the BGM Source. **INITIAL**	• Y=4 (1) 00-09 : BGM Program No. 0-9 (2) D000-D255 : Trunk No. connected to BGM Source
END		

BOSS/SECRETARY CALLING

Programming

To set up the Secretary station with the D^{term}:

START

	DESCRIPTION	DATA
CM13	Assign the Secretary station to the required station number.	• YY=12 (1) X-XXXXXXXX: My Line No. of Secretary (2) 0 : Secretary station
CM90	If the Boss station is a Single-Line Telephone with MW lamp, provide the Message Waiting service to the Boss station.	• YY=03 (1) X-XXXXXXXX: Boss Station No. (2) 0 : Provided
	Assign the Boss line key as a Secondary Extension line to the Secretary's D^{term}.	• YY=00 (1) My Line No. of Secretary + $\boxed{,}$ + Key No. (2) X-XXXXXXXX: Boss Station No. / Boss My Line No.
	Assign the MW SET/MW RESET keys to the Secretary's D^{term}, if needed.	• YY=00 (1) My Line No. of Secretary + $\boxed{,}$ + Key No. (2) F0040: MW Set F0041: MW Reset
	If the Boss station is a D^{term}, assign a MW Lamp to the Boss' D^{term}.	• YY=00 (1) My Line No. of Boss + $\boxed{,}$ + Key No. (2) F1005: MW Lamp
CM20	Assign the access code for MW Set/MW Reset to the secretary's D^{term}, if required.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A040 : MW Set A041 : MW Reset
CM08	Whether Message Waiting/Message Reminder is reset (turning the MW Lamp off) irrespective of answering of calling station when the called station calls to retrieve the message.	(1) 234 (2) 0 : Available 1◀ : Not available (Reset by answering of calling station)
	Specify the MW Lamp indication pattern for D^{term}.	(1) 294 (2) 0 : Flashing (60 IPM) 1◀ : Steady lighting

A

	DESCRIPTION	DATA
A		
CM51	Assign the destination of the call from the Boss station that has Message Waiting set.	• YY=15 (1) 00-63: Tenant No. (2) X-XXXXXXXX: Secretary Station No.
CM12	To provide Boss/Secretary Override, assign Service Restriction Class A for Call Waiting to the Secretary station.	For Secretary Station: • YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀ : Service Restriction Class A
CM15	Allow Call waiting to the Secretary station in the Service Restriction Class A assigned by CM12 YY=02.	• YY=43 Calling Side (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM12	To provide Boss/Secretary Override, assign the Service Restriction Class A for Call Waiting to the Boss station.	For Boss Station: • YY=02 (1) X-XXXX: Station No. (2) XX ZZ XX: 00-15◀ : Service Restriction Class A
CM15	Allow Call waiting to the Boss station in the Service Restriction Class A assigned by CM12 YY=02.	• YY=44 Called Side (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
END		

To assign the Boss station as a single line telephone:

START	DESCRIPTION	DATA
CM12	Set the data for accommodating the Boss' line to the Secretary's Sub line.	• YY=05 (1) X-XXXXXXXX: Boss Station No. (2) 0 : Accommodated 1◀ : Not accommodated
CM13	Specify whether to send ringing signal to the Boss station.	• YY=08 (1) X-XXXXXXXX: Boss Station No. (2) 0 : Do not send 1◀ : Send
END		

Hardware Required

D$^{\text{term}}$ and DLC card

BROKER’S CALL

Programming

Refer to CALL HOLD on Page 285.

CALL BACK

Programming

START	DESCRIPTION	DATA
CM08	Provide the system with the Single Digit Feature Access Code while the calling station hears ringback tone/busy tone.	(1) 156 : Ringback Tone (2) 0 : Available (1) 208 : Busy Tone (2) 0 : Available
	To activate the Single Digit Feature Access Code, set CM08>050, 051, 069 and 148 to "1".	(1) 050 : * Button as Switch Hook Flash (2) 1◀ : Ineffective (1) 051 : # Button as Switch Hook Flash (2) 1◀ : Ineffective (1) 069 : Single Digit Dialing on BT Connection (2) 1◀ : Step Call (1) 148 : Same Last Digit Redialing on BT Connection (2) 1◀ : Ineffective

Note 1: *The single digit access code "2" is assigned as fixed for this feature.*

Note 2: *While the calling D^{term}, DP or DTMF telephone is holding the other call, the single digit access code "2" is not available.*

Note 3: *From a DTMF telephone a hooking operation is required before dialing the single digit access code.*

CM12	Assign Service Restriction Class A to the necessary stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀ : Service Restriction Class A

A

	DESCRIPTION	DATA
A		
CM15	Allow Call Back in the Service Restriction Class A assigned by CM12 YY=02.	• YY=03 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
	Allow Call Back-Multiple Assignment in the Service Restriction Class A assigned by CM12 YY=02, if required.	• YY=46 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for Call Back.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (*1, #1) (2) A002 : Call Back Set A003 : Call Back Cancel For setting the same access code as Trunk Queuing-Outgoing: (1) X-XXXX: Access Code (*1, #1) (2) A004 : Outgoing Trunk Queuing/Call Back Set A005 : Outgoing Trunk Queuing/Call Back Cancel
CM90	Assign a Call Back key to the D$^{\text{term}}$s, as required.	• YY=00 (1) My Line No.+ $\boxed{,}$ + key No. (2) F0004 : Outgoing Trunk Queuing/Call Back
END		

Hardware Required

D$^{\text{term}}$ and DLC card if required

CALL FORWARDING

Call Forwarding-All Calls

Programming

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A for this feature to the required stations.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15 ◀: Service Restriction Class A
CM15	Allow Call Forwarding All Calls in the Service Restriction Class A assigned by CM12 YY=02. **Note:** *When providing Call Forwarding-All Calls-Outside, set "1" (Allow) for CM15 YY=00, YY=26.*	• YY=00 Call Forwarding-All Calls • YY=26 Call Forwarding-All Calls-Outside (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1 ◀ : Allow
CM20	Assign the access code for Call Forwarding-All Calls, Set and Cancel, respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (*5, #5) (2) A010: Call Forwarding-All Calls Set A011: Call Forwarding-All Calls Cancel
CM35	To apply this feature to incoming calls, set the trunk route combinations for Tandem Connection.	• YY=05 (1) 00-63: Trunk Route No. **Note** (2) 1 ◀ : Release signal arrive **Note**
CM36	**Note:** *For Resident System Programming, refer to the Command Manual.*	• Y=0 (1) Incoming Trunk Route No. + Outgoing Trunk Route No. assigned by CM35 (2) YY=05 0: Allow
A		

A

	DESCRIPTION	DATA
CM08	Specify the setting method for Call Forwarding-All Calls-Outside.	(1) 222 (2) 0 : Setting when the station goes on hook/when receiving Service Set Tone (ORT time out) 1 ◀: Setting when receiving Service Set Tone (ORT time out)
	Assign whether an extension can set a destination of Call Forwarding-All Calls-Outside by entering only a trunk access code.	(1) 386 (2) 0 : Restricted 1 ◀ : Allowed
	Assign whether the system should check the trunk restriction class of the forwarded station during Call Forwarding-All Calls-Outside.	(1) 387 (2) 0 : Follow the trunk restriction class 1 ◀ : No check
	Select the trunk route seized for Call Forwarding-All Calls-Outside. **(Series 2100 software required)**	(1) 600 (2) 0 : By calling party's tenant/ terminating trunk's tenant 1 ◀ : By Call Forwarding setting station's tenant
CM90	Assign Call Forwarding-All Calls keys to the D^{term}s, as required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0010 : Call Forwarding-All Calls Set/ Cancel
CM65	Provide Call Forwarding feature to each tenant as per incoming call type.	• YY=23 Internal Call or ATT-assisted Call • YY=24 C.O. Incoming Call • YY=25 Tie Line Incoming Call (1) 00-63 : Tenant No. (2) 1 ◀ : Call Forwarding
CM48	Select the Dial Tone on Setting Call Forwarding-All Calls. **INITIAL**	• Y=2 (1) 13 : Dial Tone on Setting Call Forwarding-All Calls (2) 0 : Special Dial Tone (Stutter Dial Tone) 1 ◀: Dial Tone

END

Hardware Required

D^{term} and DLC card if required

Call Forwarding-Busy Line

Programming

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A for this feature to the required stations.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Call Forwarding-Busy Line in the Service Restriction Class A assigned by CM12 YY=02. **Note:** *When providing Call Forwarding-Busy Line-Outside, set "1" (Allow) for CM15 YY=11, YY=28, YY=12, YY=29.*	• YY=11 Call Forwarding-Busy Line • YY=28 Call Forwarding-Busy Line-Outside • YY=12 Call Forwarding-Busy Line/-No Answer • YY=29 Call Forwarding-Busy Line-Outside/-No Answer-Outside (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for Call Forwarding-Busy Line, Set and Cancel, respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (*6, #6) (2) A014: Call Forwarding-Busy Line Set A015: Call Forwarding-Busy Line Cancel For setting the same access code as Call Forwarding-No Answer (1) X-XXXX: Access Code (*6, #6) (2) A012: Call Forwarding-No Answer/Busy Line Set A013: Call Forwarding-No Answer/Busy Line Set
CM35	To apply this feature to incoming calls, set the trunk route combinations for Tandem Connection.	• YY=05 (1) 00-63 : Trunk Route No. **Note** (2) 1◀ : Release signal arrive **Note**
CM36	**Note:** *For Resident System Programming, refer to the Command Manual.*	• Y=0 (1) Incoming Trunk Route No. + Outgoing Trunk Route No. assigned by CM35 YY=05 (2) 0 : Allow
A		

A	DESCRIPTION	DATA
CM08	Specify the setting method for Call Forwarding-Busy Line-Outside.	(1) 222 (2) 0 : Setting when the station goes on hook/when receiving Service Set Tone (ORT time out) 1◀ : Setting when receiving Service Set Tone (ORT time out)
	Allow or restrict the ability to set Call Forwarding-Busy Line for a station with Do Not Disturb set.	(1) 240 (2) 0 : Allow 1◀ : Restricted
	Assign whether an extension can set a destination of Call Forwarding-Busy Line-Outside by entering only a trunk access code.	(1) 386 (2) 0 : Restricted 1◀ : Allowed
	Assign whether the system should check the trunk restriction class of the forwarded station during Call Forwarding- Busy Line Outside.	(1) 387 (2) 0 : Follow the trunk restriction class 1◀ : No check
	Select the trunk route seized for Call Forwarding-Busy Line-Outside. **(Series 2100 software required)**	(1) 600 (2) 0 : By calling party's tenant/ terminating trunk's tenant 1◀ : By Call Forwarding setting station's tenant
CM90	Assign Call Forwarding-Busy Line keys to the D^{term}, as required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0014: Call Forwarding-Busy Line Set/ Cancel For setting the same key as Call Forwarding-No Answer (1) My Line No. + $\boxed{,}$ + Key No. (2) F0012 : Call Forwarding-No Answer/ Busy Line Set/Cancel
CM65	Provide Call Forwarding feature with each tenant as per incoming call type.	• YY=23 Internal Call or ATT assisted Call • YY=24 C.O. Incoming Call • YY=25 Tie Line Incoming Call (1) 00-63: Tenant No. (2) 1◀ : Call Forwarding
END		

Hardware Required

D^{term} and DLC card if required

Call Forwarding-No Answer

Programming

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A to the required stations.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Call Forwarding-No Answer in the Service Restriction Class A assigned by CM12 YY=02. **Note:** *When providing Call Forwarding-No Answer-Outside, set “1” (Allow) for CM15 YY=10, YY=27, YY=12, YY=29.*	• YY=10 Call Forwarding-No Answer • YY=27 Call Forwarding-No Answer-Outside • YY=12 Call Forwarding-Busy Line/-No Answer • YY=29 Call Forwarding-Busy Line-Outside/-No Answer-Outside (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow (3)
CM20	Assign the access code for Call Forwarding-No Answer, Set and Cancel, respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (*6, #6) (2) A016: Call Forwarding-No Answer Set A017: Call Forwarding-No Answer Cancel For setting the same access code as Call Forwarding-Busy Line (1) X-XXXX: Access Code (*6, #6) (2) A012:Call Forwarding-No Answer/Busy Line Set A013:Call Forwarding-No Answer/Busy Line Cancel
CM41	Specify the timing for Call Forwarding-No Answer for a trunk incoming call.	• Y=0 (1) 01 (2) 01-30: 4 sec.-120 sec. (4 sec. increments) If no data is set, the default setting is 32-36 sec.
	Specify the timing for Call Forwarding-No Answer for an internal call or an assisted call.	• Y=0 (1) 15 (2) 01-30: 4 sec.-120 sec. (4 sec. increments) If no data is set, the default setting is 32-36 sec.
A		

	DESCRIPTION	DATA
A		
CM35	To apply this feature to incoming calls, set the trunk route combinations for Tandem Connection.	• YY=05 (1) 00-63 : Trunk Route No. **Note** (2) 1◀ : Release signal arrives **Note**
CM36	**Note:** *For Resident System Programming, refer to the Command Manual.*	• Y=0 (1) Incoming Trunk Route No. + Outgoing Trunk Route No. assigned by CM35 YY=05 (2) 0: Allow
CM08	Specify the setting method for Call Forwarding-No Answer-Outside.	(1) 222 (2) 0 : Setting when the station goes on hook/when receiving Service Set Tone (ORT time out) 1◀ : Setting when receiving Service Set Tone (ORT time out)
	Assign whether an extension can set a destination of Call Forwarding-No Answer-Outside by entering only a trunk access code.	(1) 386 (2) 0 : Restricted 1◀ : Allowed
	Assign whether the system should check the trunk restriction class of the forwarded station during Call Forwarding-No Answer-Outside.	(1) 387 (2) 0 : Follow the trunk restriction class 1◀ : No check
	Select the trunk route seized for Call Forwarding-No Answer-Outside. **(Series 2100 software required)**	(1) 600 (2) 0 : By calling party's tenant /terminating trunk's tenant 1◀ : By Call Forwarding setting station's tenant
B		

B

	DESCRIPTION	DATA
CM90	Assign Call Forwarding-No Answer keys to the D^{term}s, as required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0016 : Call Forwarding-No Answer Set/Cancel For setting the same key as Call Forwarding-Busy Line (1) My Line No. + $\boxed{,}$ + Key No. (2) F0012 : Call Forwarding-No Answer/ Busy Line Set/Cancel
CM65	Provide Call Forwarding feature with each tenant as per incoming call type.	• YY=23 Internal Call or ATT assisted Call • YY=24 C.O. Incoming Call • YY=25 Tie Line Incoming Call (1) 00-63 : Tenant No. (2) 1◀ : Call Forwarding

END

Hardware Required

D^{term} and DLC card if required

Call Forwarding-Destination

Programming

START

	DESCRIPTION	DATA
CM12	Assign Service Restriction Class A to each station.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Call Forwarding-Destination in the Service Restriction Class A assigned by CM12 YY=02.	• YY=15 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for Call Forwarding-Destination, Entry and Cancellation, respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX : Access Code (*7, #7) (2) A018 : Call Forwarding-Destination Entry A019 : Call Forwarding-Destination Cancel
CM90	Assign Call Forwarding-Destination Set/ Cancel Keys to the D^{term}s, as required.	• Y=0 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0018 : Set F0019 : Cancel

END

Call Forwarding-Override

Programming

To allow the call forward destination station user to call the station which has set Call Forwarding-All Calls, no programming is required.
To allow the call forward destination station user with D^{term} Sub Line to call the station which has set Call Forwarding-All Calls to the My Line of the station, assign the following data.

	DESCRIPTION	DATA
START		
CM08	Provide Call Forwarding-Override when Call Forwarding-All Calls is set to the My Line of the D^{term}. **(Series 2200 R3.1 software required)**	(1) 509 (2) 0: Call Forwarding-Override
	Restrict the call termination to the My Line while the station user makes a call with the Sub Line on the D^{term}.	(1) 268 (2) 0: Restricted
END		

Hardware Required

D^{term} and DLC card as required

Multiple Call Forwarding-All Calls

Programming

In addition to the programming for Call Forwarding-All Calls, do the following programming.

	DESCRIPTION	DATA
START		
CM42	Specify the number of times a call can be forwarded.	(1) 14 (2) 01-05 : Number of times (One to five times) If no data is set, the default setting is 5.
END		

Multiple Call Forwarding-Busy Line

Programming

In addition to the programming for Call Forwarding-Busy Line, do the following programming.

START	DESCRIPTION	DATA
CM42	Specify the number of times a call can be forwarded.	(1) 14 (2) 01-05 : Number of times (One to five times) If no data is set, the default setting is 5.
END		

Multiple Call Forwarding-No Answer

Programming

In addition to the programming for Call Forwarding-No Answer, do the following programming.

START	DESCRIPTION	DATA
CM41	Specify the timing for No Answer after second Call Forwarding.	• Y=0 (1) 46 (2) 01-30 : 4 -120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.
END		

Split Call Forwarding-All Calls

Programming

To activate Split Call Forwarding feature, both Call Forwarding and Split Call Forwarding settings are required.

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A for this feature to the required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀:Service Restriction Class A
CM15	Allow Call Forwarding-All Calls in the Service Restriction Class A assigned by CM12 YY=02. **Note:** *To provide this feature, set "1" (Allow) for CM15 YY=00, YY=26.*	• YY=00 Call Forwarding-All Calls • YY=26 Call Forwarding-All Calls-Outside (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for Call Forwarding-All Calls, Set and Cancel, respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (*5, #5) (2) A010: Call Forwarding-All Calls Set A011: Call Forwarding-All Calls Cancel
	Assign the access code for Split Call Forwarding-All Calls, Set and Cancel, respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A180: Split Call Forwarding-All Calls Set A181: Split Call Forwarding-All Calls Cancel
CM35	To apply this feature to incoming calls, set the trunk route combinations for Tandem Connection.	• YY=05 (1) 00-63: Trunk Route No. **Note** (2) 1◀ : Release signal arrives **Note**
CM36	**Note:** *For Resident System Programming, refer to the Command Manual.*	• Y=0 (1) Incoming Trunk Route No. + Outgoing Trunk Route No. assigned by CM35 YY=05 (2) 0: Allow
A		

A

	DESCRIPTION	DATA
CM08	Specify the setting method for Call Forwarding-All Calls-Outside.	(1) 222 (2) 0 : Setting when the station goes on hook/when receiving Service Set Tone (ORT time out) 1◀ : Setting when receiving Service Set Tone (ORT time out)
	Assign whether an extension can set a destination of Split Call Forwarding-All Calls-Outside by entering only a trunk access code.	(1) 386 (2) 0 : Restricted 1◀ : Allowed
	Assign whether the system should check the trunk restriction class of the forwarded station during Split Call Forwarding-All Calls-Outside.	(1) 387 (2) 0 : Follow the trunk restriction class 1◀ : No check
	Select the trunk route seized for Split Call Forwarding-All Calls-Outside. **(Series 2100 software required)**	(1) 600 (2) 0 : By calling party's tenant/terminating trunk's tenant 1◀ : By Call Forwarding setting station's tenant
	Select the Call Forwarding type when an incoming call terminates via CCIS. **(Series 2200 R3.1 software required)**	(1) 608 (2) 0 : As per CM65 YY=37/38/39 1◀ : As per CM65 YY=23/24/25
CM90	Assign Call Forwarding-All Calls keys to the D^{term}s, as required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0010: Call Forwarding-All Calls Set/ Cancel
	Assign Split Call Forwarding-All Calls keys to the D^{term}s, as required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0A80: Split Call Forwarding-All Calls Set/Cancel

B

	DESCRIPTION	DATA
B		
CM65	Select the feature available in each tenant when an internal call and a Tie Line/C.O. incoming call is terminated.	• YY=23 Internal Call or ATT assisted Call • YY=24 C.O. Incoming Call • YY=25 Tie Line Incoming Call (1) 00-63 : Tenant No. (2) 0 : Split Call Forwarding 1◀ : Call Forwarding
	Select the feature available in each tenant when an internal call via CCIS and a Tie Line/ C.O. incoming call via CCIS are terminated. **(Series 2200 R3.1 software required)** **Note:** *CM65 YY=37/38/39 is effective only when CM08>608 2nd data=0.*	• YY=37 Internal Call or ATT assisted Call via CCIS • YY=38 C.O. Incoming Call via CCIS • YY=39 Tie Line Incoming Call via CCIS (1) 00-63: Tenant No. (2) 0 : Split Call Forwarding 1◀ : Call Forwarding
CM78	Assign the destination of Split Call Forwarding. (See **Note** on next page.)	(1) XX Y XX: 00-63: Tenant No. Y : 0-7: Block No. (2) X-XX + $\boxed{,}$ + YY···Y X-XX : Trunk Access Code (1-2 digits) YY···Y : Called No. (Max. 26 digits) X-XXXXXXXX: Station No. (1-8 digits)
CM48	Select the Dial Tone on setting Split Call Forwarding-All Calls.	• Y=2 (1) 13 : Dial Tone on Setting Split Call Forwarding-All Calls (2) 0 : Special Dial Tone (Stutter Dial Tone) 1◀ : Dial Tone
END		

Note: *The operating procedure for Split Call Forwarding-All Calls is as follows:*
CM78 is used to assign the destination forwarded when the destination No. 0-7 is specified.

Dial Access Code for Split Call Forwarding - All Calls.

or

Press Split Call Forwarding - All Calls key.

+

Dial Destination No. X (0-9).

0: BLOCK No. 0
1: 1
2: 2
3: 3
4: 4
5: 5
6: 6
7: BLOCK No. 7

Destination assigned by CM78.

8: Destination for Call Forwarding-All Calls
9: Destination for Station Speed Dialing (BLOCK No. 0)

Hardware Required

D^{term} with LCD and DLC card, if required

Split Call Forwarding-Busy Line

Programming

To activate Split Call Forwarding feature, both Call Forwarding and Split Call Forwarding settings are required.

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A for this feature to the required stations.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Call Forwarding-Busy Line in the Service Restriction Class A assigned by CM12 YY=02. **Note:** *To provide this feature, set "1" (Allow) for CM15 YY=11, YY=28, YY=12, YY=29.*	• YY=11 Call Forwarding-Busy Line • YY=28 Call Forwarding-Busy Line-Outside • YY=12 Call Forwarding-Busy Line/-No Answer • YY=29 Call Forwarding-Busy Line-Outside/-No Answer-Outside (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for Call Forwarding-Busy Line, Set and Cancel, respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (*6, #6) (2) A014: Call Forwarding-Busy Line Set A015: Call Forwarding-Busy Line Cancel For setting the same access code as Call Forwarding-No Answer (1) X-XXXX: Access Code (*6, #6) (2) A012: Call Forwarding-No Answer/ Busy Line Set A013: Call Forwarding-No Answer/ Busy Line Cancel
	Assign the access code for Split Call Forwarding-Busy Line, Set and Cancel, respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A182: Split Call Forwarding-Busy Line/ -No Answer Set A183: Split Call Forwarding-Busy Line/ -No Answer Cancel
A		

A

	DESCRIPTION	DATA
CM35	To apply this feature to incoming calls, set the trunk route combinations for Tandem Connection.	• YY=05 (1) 00-63 : Trunk Route No. **Note** (2) 1◀ : Release signal arrives **Note**
CM36	**Note:** *For Resident System Programming, refer to the Command Manual.*	• Y=0 (1) Incoming Trunk Route No. + Outgoing Trunk Route No. assigned by CM35 YY=05 (2) 0: Allow
CM08	Specify the setting method for Call Forwarding-Busy Line-Outside.	(1) 222 (2) 0 : Setting when the station goes on hook/when receiving Service Set Tone (ORT time out) 1◀ : Setting when receiving Service Set Tone (ORT time out)
	Allow or restrict the ability to set Call Forwarding-Busy Line for a station with Do Not Disturb set.	(1) 240 (2) 0 : Allowed 1◀ : Restricted
	Assign whether an extension can set a destination of Split Call Forwarding-Busy Line-Outside by entering only a trunk access code.	(1) 386 (2) 0 : Restricted 1◀ : Allowed
	Assign whether the system should check the trunk restriction class of the forwarded station during Call Forwarding-Busy Line-Outside.	(1) 387 (2) 0 : Follow the trunk restriction class 1◀ : No check
	Select the trunk route seized for Split Call Forwarding-Busy Line-Outside. **(Series 2100 software required)**	(1) 600 (2) 0 : By calling party's tenant/ terminating trunk's tenant 1◀ : By Call Forwarding setting station's tenant
	Select the Call Forwarding type when an incoming call terminates via CCIS **(Series 2200 R3.1 software required)**	(1) 608 (2) 0 : As per CM65 YY=37/38/39 1◀ : As per CM65 YY=23/24/25

B

	DESCRIPTION	DATA
B		
CM90	Assign Call Forwarding-Busy Line keys to the D^{term}s, as required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0014: Call Forwarding-Busy Line Set/ Cancel For setting the same key as Call Forwarding - No Answer (1) My Line No. + $\boxed{,}$ + Key No. (2) F0012: Call Forwarding-No Answer/ Busy Line Set/Cancel
	Assign Split Call Forwarding-Busy Line keys to the D^{term}s, as required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0A82: Split Call Forwarding-Busy Line/-No Answer Set/Cancel
CM65	Select the feature available in each tenant when an internal call and a Tie Line/C.O. incoming call is terminated.	• YY=23 Internal Call or ATT Assisted Call • YY=24 C.O. Incoming Call • YY=25 Tie Line Incoming Call (1) 00-63 : Tenant No. (2) 0 : Split Call Forwarding 1◀ : Call Forwarding
	Select the feature available in each tenant when an internal call via CCIS and a Tie Line/ C.O. incoming call via CCIS are terminated. **(Series 2200 R3.1 software required)** **Note:** *CM65 YY=37/38/39 is effective only when CM08>608 2nd data=0.*	• YY=37 Internal Call or ATT Assisted Call • YY=38 C.O. Incoming Call via CCIS • YY=39 Tie Line Incoming Call via CCIS (1) 00-63 : Tenant No. (2) 0 : Split Call Forwarding 1◀ : Call Forwarding
CM78	Assign the destination of Split Call Forwarding. (See **Note** on next page.)	(1) XX Y XX : 00-63: Tenant No. Y : 0-7: Block No. (2) X-XX + $\boxed{,}$ + YY⋯Y X-XX: Trunk Access Code (1-2 digits) YY⋯Y: Called No. (Max. 26 digits) X-XXXXXXXX : Station No. (1-8 digits)
END		

Note: *The operating procedure for Split Call Forwarding-Busy Line/No Answer is as follows: CM78 is used to assign the destination forwarded when the destination No. 0-7 is specified.*

Dial Access Code for Split Call Forwarding-Busy Line/-No Answer.

or

Press Split Call Forwarding- Busy Line/-No Answer key.

+

Dial Destination No. X (0-9).
0: BLOCK No. 0
1: 1
2: 2
3: 3
4: 4
5: 5
6: 6
7: BLOCK No. 7
8: Destination for Call Forwarding-Busy Line/-No Answer
9: Destination for Station Speed Dialing (BLOCK No. 0)

Destination assigned by CM78.

Hardware Required

D^{term} with LCD and DLC card if required

Split Call Forwarding-No Answer

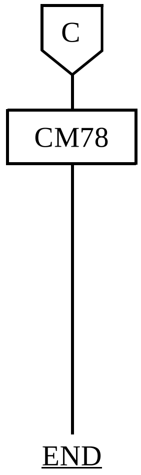
Programming

To activate Split Call Forwarding feature, both Call Forwarding and Split Call Forwarding settings are required.

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A for this feature to the required stations.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Call Forwarding-No Answer in the Service Restriction Class A assigned by CM12 YY=02. **Note:** *To provide this feature, set “1” (Allow) for CM15 YY=10, YY=27, YY=12, YY=29.*	• YY=10 Call Forwarding-No Answer • YY=27 Call Forwarding-No Answer-Outside • YY=12 Call Forwarding-Busy Line/-No Answer • YY=29 Call Forwarding-Busy Line-Outside/-No Answer-Outside (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for Call Forwarding-No Answer, Set and Cancel, respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (*6, #6) (2) A016: Call Forwarding-No Answer Set A017: Call Forwarding-No Answer Cancel For setting the same access code as Call Forwarding-Busy Line (1) X-XXXX: Access Code (*6, #6) (2) A012: Call Forwarding-No Answer/ Busy Line Set A013: Call Forwarding-No Answer/ Busy Line Cancel
	Assign the access code for Split Call Forwarding-No Answer, Set and Cancel, respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A182: Split Call Forwarding-Busy Line/ -No Answer Set A183: Split Call Forwarding-Busy Line/ -No Answer Cancel
A		

	DESCRIPTION	DATA
A		
CM41	Specify the timing for Call Forwarding-No Answer for a trunk incoming call.	• Y=0 (1) 01 (2) 01-30: 4 sec.-120 sec. (4 sec. increments) If no data is set, the default setting is 32-36 sec.
	Specify the timing for Call Forwarding-No Answer for an internal call or an assisted call.	• Y=0 (1) 15 (2) 01-30: 4 sec.-120 sec. (4 sec. increments) If no data is set, the default setting is 32-36 sec.
CM35	To apply this feature to incoming calls, set the trunk route combinations for Tandem Connection.	• YY=05 (1) 00-63: Trunk Route No. **Note** (2) 1◀ : Release signal arrives **Note**
CM36	**Note:** *For Resident System Programming, refer to the Command Manual.*	• Y=0 (1) Incoming Trunk Route No. + Outgoing Trunk Route No. assigned by CM35 YY=05 (2) 0: Allow
CM08	Specify the setting method for Call Forwarding-No Answer-Outside.	(1) 222 (2) 0 : Setting when the station goes on hook/when receiving Service Set Tone (ORT time out) 1◀ : Setting when receiving Service Set Tone (ORT time out)
	Assign whether an extension can set a destination of Split Call Forwarding-No Answer-Outside by entering only a trunk access code.	(1) 386 (2) 0 :Restricted 1◀ : Allowed
	Assign whether the system should check the trunk restriction class of the forwarded station during Split Call Forwarding-No Answer-Outside.	(1) 387 (2) 0 : Follow the trunk restriction class 1◀ : No check
B		

	DESCRIPTION	DATA
B		
CM08	Select the trunk route seized for Split Call Forwarding-No Answer-Outside. **(Series 2100 software required)**	(1) 600 (2) 0 : By calling party's tenant/terminating trunk's tenant 1◀ : By Call Forwarding setting station's tenant
	Select the Call Forwarding type when an incoming call terminates via CCIS. **(Series 2200 R3.1 software required)**	(1) 608 (2) 0 : As per CM65 YY=37/38/39 1◀ : As per CM65 YY=23/24/25
CM90	Assign Call Forwarding-No Answer keys to the D^{term}s, as required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0016: Call Forwarding-No Answer Set/ Cancel For setting the same key as Call Forwarding-Busy Line. (1) My Line No. + $\boxed{,}$ + Key No. (2) F0012: Call Forwarding-No Answer/ Busy Line Set/Cancel
	Assign Split Call Forwarding-No Answer keys to the D^{term}s, as required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0A82: Split Call Forwarding-Busy Line/-No Answer Set/Cancel
CM65	Select the feature available in each tenant when an internal call and a Tie Line/C.O. incoming call is terminated.	• YY=23 Internal Call or ATT assisted Call • YY=24 C.O. Incoming Call • YY=25 Tie Line Incoming Call (1) 00-63: Tenant No. (2) 0 : Split Call Forwarding 1◀ : Call Forwarding
	Select the feature available in each tenant when an internal call via CCIS and a Tie Line/ C.O. incoming call via CCIS are terminated. **(Series 2200 R3.1 software required)** **Note:** *CM65 YY=37/38/39 is effective only when CM08>608 2nd data =0.*	• YY=37 Internal Call or ATT assisted Call via CCIS • YY=38 C.O. Incoming Call via CCIS • YY=39 Tie Line Incoming Call via CCIS (1) 00-63: Tenant No. (2) 0 : Split Call Forwarding 1◀ : Call Forwarding
C		



DESCRIPTION	DATA
Assign the destination of Split Call Forwarding. (See **Note** below.)	(1) XX Y XX : 00-63: Tenant No. Y : 0-7: Block No. (2) X-XX + $\boxed{,}$ + YY⋯Y X-XX: Trunk Access Code (1-2 digits) YY⋯Y: Called No. (Max. 26 digits) X-XXXXXXXX: Station No. (1-8 digits)

Note: *The operating procedure for Split Call Forwarding-Busy Line/No Answer is as follows: CM78 is used to assign the destination forwarded when the destination No. 0-7 is specified.*

Dial Access Code for Split Call Forwarding-Busy Line/-No Answer.

or

Press Split Call Forwarding- Busy Line/-No Answer key.

+

Dial Destination No. X (0-9).

0: BLOCK No. 0
1: 1
2: 2
3: 3
4: 4
5: 5
6: 6
7: BLOCK No. 7

Destination assigned by CM78.

8: Destination for Call Forwarding-Busy Line/ -No Answer
9: Destination for Station Speed Dialing (BLOCK No. 0)

Hardware Required

D^{term} with LCD and DLC card, if required

Set/Reset From MAT/CAT

Programming

To set or reset the Call Forwarding service from a MAT/CAT, use the following command.

START	DESCRIPTION	DATA
CME6	Use YY=00-03 for Call Forwarding and YY=04-05 for Split Call Forwarding. To reset the service, assign “CCC” to the second data of each Y No.	• YY=00 CF-All Calls • YY=01 CF-Busy Line • YY=02 CF-No Answer • YY=03 CF-Busy Line/No Answer (1) X-XXXXXXXX: Station No. (2) Destination No. <Destination=Extension> X-XXXXXXXX: Station No. <Destination=Outside Party> X-XX + $\boxed{,}$ + YY···Y X-XX : Outgoing Trunk/LCR Group Access Code (1-2 digits) $\boxed{,}$: Separate Mark YY···Y : Called No. (Max. 26 digits) <Destination=ATTCON> E000: ATTCON • YY=04 Split CF-ALL Calls • YY=05 Split CF-Busy Line/No Answer (1) X-XXXXXXXX: Station No. (2) 0: Target Station for Split CF (Block 0)/ ATT 1: Target Station for Split CF (Block 1) 2: Target Station for Split CF (Block 2) 3: Target Station for Split CF (Block 3) 4: Target Station for Split CF (Block 4) 5: Target Station for Split CF (Block 5) 6: Target Station for Split CF (Block 6) 7: Target Station for Split CF (Block 7) 8: Target Station for Call Forwarding 9: Station Speed Dialing (Block 0)
END		

Group Diversion

Programming

START	DESCRIPTION	DATA
CM08	Provide the system with Group Diversion.	(1) 026: Group Diversion (2) 0: To provide
CM16	Assign the members to be included in each Group Diversion group.	• Y=2 Group Diversion group (1) X-XXXXXXXX: Station No. to be included in a Group Diversion group (2) 00-30: Group Diversion group No.
CM19	Assign the destination for each Group Diversion group to the required stations.	• Y=6 (1) 00-30: Group Diversion group No. (2) X-XXXXXXXX: Diversion group No.
CM41	Assign the timing for transferring a call using this feature.	• Y=0 (1) 01 (2) 01-30: 4 sec. - 120 sec. (4 sec. increments) If no data is set, the default setting is 32-36 sec.
END		

Note: *The number of stations that can be included in a Group Diversion is unlimited.*

CALL PARK

Call Park-System

Programming

START	DESCRIPTION	DATA
CM08	Specify whether a trunk line placed on Consultation Hold by Call Park-System can be retrieved by pressing a trunk line appearance key on a D^{term}.	(1) 133 (2) 0 : Not available 1◀ : Available
CM12	Assign Service Restriction Class C to each station.	• YY=07 (1) X-XXXXXXXX: Station No. (2) 00-15◀: Service Restriction Class C
CM15	Assign the type of D^{term} to Service Restriction Class C assigned by CM12 YY=07.	• YY=96 (1) 00-15 : Service Restriction Class C assigned by CM12 YY=07 (2) 1◀ : With LCD
CM41	Specify the recall timing for the Call Park-System.	• Y=0 (1) 05 (2) 01-98 : 4 sec.-392 sec. (4 sec. increments) 99 : Recall is not performed If no data is set, the default setting is 60-64 sec.

To provide Call Park-System with dialing a Park number

To provide Call Park-System with dialing a station number

To provide Call Park-System with dialing a Park number

A	DESCRIPTION	DATA
CM20	Assign the access code for Call Park-System set and retrieve.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A008: Call Park-System Set A009: Call Park-System Retrieve
CM90	Assign a Call Park-System key to the D^{term}, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F5000: Call Park-System
	Assign a Call Park-System key to ATTCON/ DESKCON, if required.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6144: Call Park-System
END		

To provide Call Park-System with dialing a station number

B	DESCRIPTION	DATA
CM20	Assign the access code for Call Park-System Set which retrieved by dialing station number/ Retrieve by dialing station number. **(Series 2200 R3.1 software required)**	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A198: Call Park-System Set which retrieved by dialing station number A199: Call Park-System Retrieve by dialing station number
CM90	Assign a function key for Call Park-System which retrieved by dialing station number to the D^{term}, if required. **(Series 2200 R3.1 software required)**	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0A98: Call Park-System Set which retrieved by dialing station number
END		

Hardware Required

D^{term} and DLC card as required

Call Park-Tenant

Programming

START	DESCRIPTION	DATA
CM20	Assign access codes for Call Park-Tenant set/ retrieve.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX : Access Code (2) A062 : Call Park-Tenant Set/ Retrieve
CM08	Specify whether a trunk line placed on Consultation Hold by Call Park-Tenant can be retrieved by pressing a trunk line appearance key on a D^{term}.	(1) 133 (2) 0 : Not available 1◀ : Available
CM41	Specify the recall timing for Call Park - Tenant.	• Y=0 (1) 05 (2) 01-98: 4 sec.-392 sec. (4 sec. increments) 99 : Recall is not performed If no data is set, the default setting is 60-64 sec.
CM90	Assign Call Park-Tenant Retrieve keys to the D^{term}, as required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F3XX Z XX: 00-63: Group No. Z : 1-8: Serial No.
END		

Hardware Required

D^{term} and DLC card if required

CALL PICKUP

Call Pickup-Direct

Programming

START

	DESCRIPTION	DATA
CM12	Assign Service Restriction Class A to each station.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Call Pickup-Direct in the Service Restriction Class A assigned by CM12 YY=02.	• YY=14 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign an access code for Call Pickup-Direct.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A021 : Call Pickup-Direct
CM90	Assign a Call Pickup-Direct key to D^{term}, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0021: Call Pickup-Direct

END

Call Pickup-Group

Programming

	DESCRIPTION	DATA
START		
CM16	Assign each Call Pickup Group, by assigning station numbers within a group one by one with the following operation: 1st Operation (1) Station A (2) Station B 2nd Operation (1) Station B (2) Station C ≀ ≀ Last Operation (1) Station X (2) Station A	• Y=0 (1) X-XXXXXXXX: Station No. to be included in the Call Pickup Group (2) X-XXXXXXXX: Another Station No. to be included in the same group
CM20	Assign the access code for Call Pickup-Group.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX : Access Code (2) A020 : Call Pickup-Group
CM90	Assign a Call Pickup-Group key to each D^{term}, as required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0020
END		

Note 1: *There is no limit to the amount of Call Pickup groups.*

Note 2: *The maximum number of stations within a group is 60. Individual stations can be assigned to only one Call Pickup Group.*

To permit a station within the Call Pickup group to answer the calls to other lines, in the order from a specified pilot station (ringing search start position):

(Series 2200 R3.1 software required)

START

	DESCRIPTION	DATA
CM16	Assign each Call Pickup group, by assigning station numbers within a group one by one with the following operation: 1st Operation : (1) Station A (2) Station B 2nd Operation : (1) Station B (2) Station C ≀ ≀ Last Operation: (1) Station X (2) Station A	• Y=0 (1) X-XXXXXXXX: Station No. to be included in the Call Pickup group (2) X-XXXXXXXX: Another Station No. to be included in the same group
	Specify a pilot station in Call Pickup group.	• Y=8 (1) X-XXXXXXXX: Station No. to be included in the Call Pickup group (2) 0 : Pilot Station 1◀ : Member Station
CM20	Assign the access code for Call Pickup-Group (Pilot).	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A234 :Call Pickup-Group (Pilot)
CM90	Assign a Call Pickup-Group key to each D^{term}, as required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0B34: Call Pickup-Group (Pilot)

END

Note 1: *There is no limit to the amount of Call Pickup groups.*

Note 2: *The maximum number of stations within a group is 60. Individual stations can be assigned to only one Call Pickup group.*

Hardware Required

D^{term} and DLC card as required

Call Pickup-Designated Group

Programming

START

	DESCRIPTION	DATA
CM16	Assign each Call Pickup group, by assigning station numbers within a group one by one with the following operation: 1st Operation: (1) Station A (2) Station B 2nd Operation: (1) Station B (2) Station C ≀ ≀ Last Operation: (1) Station X (2) Station A	• Y=0 (1) X-XXXXXXXX : Station No. to be included in the Call Pickup Group (2) X-XXXXXXXX : Another station No. to be included in the same Call Pickup Group
CM12	Assign the Service Restriction Class A to each station.	• YY=02 (1) X-XXXXXXXX : Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Call Pickup-Direct in the Service Restriction Class A assigned by CM12 YY=02.	• YY=14 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign an access code for Call Pickup-Designated Group.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX : Access Code (2) A037 : Call Pickup-Designated Group

END

Note 1: *There is no limit to the amount of Call Pickup groups.*

Note 2: *The maximum number of stations within a group is 60. Individual station can be assigned to only one Call Pickup Group.*

CALL REDIRECT

Programming

	DESCRIPTION	DATA
START		
CM90	Provide the D^{term} with a Call Redirect key for transferring a call to a destination station or VMS.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F5011: Call Redirect 0 (For transferring to a station assigned by CM51 YY=22) F5012: Call Redirect 1 (For transferring to a VMS assigned by CM51 YY=18)
CM51	Specify the destination VMS station of Call Redirect, to each tenant.	• YY=18 (1) 00-63 : Tenant No. (2) X-XXXXXXXX : VMS Station No.
	Specify the destination station of Call Redirect, to each tenant.	• YY=22 (1) 00-63 : Tenant No. (2) X-XXXXXXXX : Station No.
END		

CALL TRANSFER

Call Transfer-All Calls

Programming

START	DESCRIPTION	DATA
CM08	Specify Call Transfer from a station before called station answers.	(1) 062 (2) 0 : Not available 1◀ : Available
END		

Call Transfer-Attendant

Programming

START	DESCRIPTION	DATA
CM20	Assign the Access code for operator calls.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (0) (2) 800
CM62	Specify the tenants to be handled by each ATT Group. **INITIAL**	• Y=Y=0-3 ATT Group 0-3 assigned by CM60 YY=00 (1) 00-63 : Tenant No. (2) 0 : To be handled
CM08	Specify Call Transfer from a station before the called attendant answers.	(1) 063 (2) 0 : Available 1◀ : Not available
END		

CALLER ID CLASS

Programming

1. Trunk Assignment for CALLER ID CLASS

START	DESCRIPTION	DATA
CM30	Specify the Terminating System in Day Mode/ Night Mode/Mode A/Mode B for incoming calls.	• YY=02 Day Mode • YY=03 Night Mode • YY=40 Mode A • YY=41 Mode B (1) 000-255: Trunk No. (2) 02 : Trunk-Direct Appearances 03 : Trunk-Direct Appearances + TAS 04 : Direct-In Termination 08 : Dial-in 09 : Automated Attendant 10 : Attendant Console + TAS 11 : Attendant Console + Trunk-Direct Appearances 12 : Attendant Console + Trunk-Direct Appearances + TAS 13 : TAS 14 : Attendant Console 16 : DISA 18 : ISDN Indial 31◀ : DID, Tie Line and any call which is not handled by the PBX
CM35	Assign the type of the trunk route.	• YY=00 Kind of Trunk Route (1) 00-63: Trunk Route No. (2) 00: DDD (C.O./DID) trunk
	Provide the trunk route with MF Signaling.	• YY=37 MF Signaling (1) 00-63: Trunk Route No. (2) 0: Available
	Specify the busy/idle status not to be sent to the network.	• YY=48 Busy/Idle Sending (1) 00-63: Trunk Route No. (2) 0: Not sent
	Assign the sending method of calling number from the network, to each trunk route.	• YYY=129 Calling No. Sending Method (1) 00-63: Trunk Route No. (2) 0: CALLER ID (CLASS SM) 1: T1-ANI
END		

2. CALLER ID Receiver Assignment

START

	DESCRIPTION	DATA
CM09	Provide the system with MF Signaling. **INITIAL**	(1) 52 : MF Signaling (2) 0 ◀ : To provide
CM05	Assign an AP number to the CIR (CALLER ID Receiver) Trunk. **INITIAL** The AP number is given by the SENSE switch on the CIR Trunk.	• Y=0 (1) 04-15: AP No. (2) 08 : CIR Trunk (4RSTC card)
CM06	Assign the MF Receiver trunk number to each circuit of the CIR Trunk. **INITIAL**	• YY=04 (1) 00-15 : MF Receiver Trunk No. (2) XX Z XX : AP No. assigned by CM05 Z : 0-3: Circuit No.
CM08	Assign requesting of ANI/CALLER ID Signal from network when an incoming call terminates.	(1) 472 : Request for ANI/CALLER ID Signal (2) 0 : Available
CMAA	Assign the sending method of calling number from the network, to the AP number assigned by CM05.	• YY=07 (1) 04-15 : AP No. (2) 0 : CALLER ID (CLASS SM) 7 ◀ : MFC-R2
CM31	Assign the number of digits of the calling number sent from the network. **INITIAL**	• Y=1 (1) 3: Number of Digits from Network (2) 01-31 : 1 digit-31 digits NONE ◀ : No data
	Assign the CALLER ID Receiver to each AP number (0-3) of the CIR Trunk. **INITIAL**	• Y=2 (1) 0-3 : AP No. **Note** (2) 3 ◀ : All circuits assigned as Receiver **Note:** *AP numbers 0-3 correspond to the AP numbers assigned by CM05 (04-15):* *CM31 Y=2 — CM05 Y=0* *AP Number 0: AP Number X* *AP Number 1: AP Number Y* *AP Number 2: AP Number Z* *AP Number 3: AP Number W* *(X < Y < Z <W)*

END

3. Memory Clear for CIR Trunk (4RSTC card)
   Clearing all data in memory for calling number development is necessary before assigning the calling number development data by CMDC and CMDB.

Note: *Before memory clear, set the SW1-1 to SW1-4 on the CIR Trunk to all ON (Make-busy) and after memory clear, restore them to all OFF.*

	DESCRIPTION	**DATA**
START		
CMDB	Clear all memory for CMDC and CMDB.	• YY=90 All Memory Clear (1) 0000 (2) CCC
END		

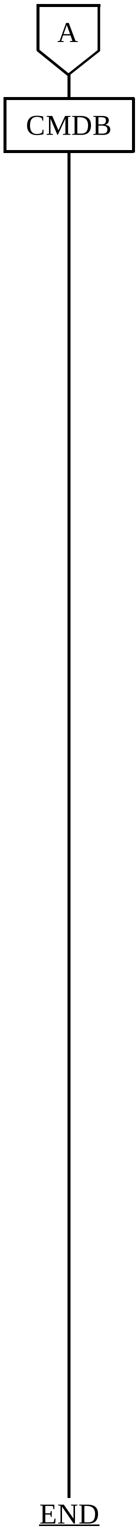
If required, clear the partial memory using the commands shown in below.

Note: *Before memory clear, set the SW1-1 to SW1-4 on the CIR Trunk to all ON (Make-busy) and after memory clear, restore them to all OFF.*

	DESCRIPTION	**DATA**
START		
CMDB	Clear the memory for the calling number Development Table number assigned by CMDC and the calling number development data assigned by CMDB.	• YY=91 Partial Memory Clear (1) 0001 (2) CCC
	Clear the memory for calling number development data assigned by CMDB.	• YY=92 Partial Memory Clear (1) 0002 (2) CCC
END		

4. CALLER ID Development Data Assignment

START	DESCRIPTION	DATA
CMDC	Assign the Development Table for the calling number sent from the network.	• YY=00-63 Trunk Tenant No. (1) Calling No. (2) 0◀-1499: Development Table No. 0-1499
CMDB	Assign whether the Trunk Tenant number is effective for developing the calling number, or not.	• YY=30 (1) 0: Trunk Tenant No. Development (2) 0◀ : Ignore actual Trunk Tenant and use the Development Table for Trunk Tenant 00 (CMDC YY=00) 1 : Execute actual Trunk Tenant and use the Development Table for each Trunk Tenant (CMDC YY=00-63)
	By character code, assign the name displayed, if required. A maximum of 14 characters are available for the name display.	• YY=00 Name Assignment (1) 0-1499: Development Table No. (2) Character Code See APPENDIX B: CHARACTER CODE TABLE
	Assign the destination station for Day Mode/ Night Mode, if required. A maximum of 12 digits are available. **Note:** *If assigning the destination station number as below, the terminating system overrides CM30 YY=02/03 for the selected Development Table.* * * * * 0 2 : Trunk-Direct Appearances * * * * 0 3 : Trunk-Direct Appearances+TAS * * * * 0 4 : Direct-in Termination * * * * 0 9 : Automated Attendant * * * * 1 0 : Attendant Console+TAS * * * * 1 1 : Attendant Console+Trunk-Direct Appearances * * * * 1 2 : Attendant Console+Trunk-Direct Appearances+ TAS * * * * 1 4 : Termination to Attendant Console * * * * 1 6 : Direct Inward System Access (DISA) * * * * 3 1 : DID, Tie Line, and any call which is not handled by the PBX **Note:** *The destination station number can also be an LCR access code plus outside telephone number.*	• YY=01 Day Mode • YY=02 Night Mode (1) 0-1499: Development Table No. (2) Destination Station No. (Max. 12 digits)
A		



DESCRIPTION	DATA
Specify the ringing tone for each calling number, if required.	• YY=04 Ringing Tone Assignment (1) 0-1499 : Development Table No. (2) 0◀ : Depends on CM35 YY=33 1 : Not used 2 : Internal Ringing Tone 3 : External Ringing Tone
Specify which is displayed on the LCD, when receiving both the calling number and the name from network on incoming call.	• YY=05 Calling Number/Name Display (1) 0-1499 : Development Table No. (2) 0◀ : Calling Number Display 1 : Calling Name Display
Specify whether the Call Waiting is set for each calling number or not.	• YY=06 Call Waiting (1) 0-1499 : Development Table No. (2) 0◀ : Not available 1 : Available **Note:** *This data is effective when the 2nd data of CM35 YY=59 is 1.*
Specify whether the UCD Priority Queuing is set for each calling number or not.	• YY=07 UCD Priority Queuing (1) 0-1499 : Development Table No. (2) 0◀ : Not priority 1 : Priority
Specify the priority for calling name display.	• YY=12 Priority for Name Display (1) 0-1499 : Development Table No. (2) 0◀ : Name received from network is displayed 1 : Name assigned by CMDB YY=00 is displayed
Specify the type of Single Data Message Frame Format.	• YY=30 (1) 1 : Single Data Message Frame Format (2) 0◀ : With Time Parameter 1 : Without Time Parameter

5. Other Relational Data Assignment

	DESCRIPTION	**DATA**
START		
CM35	Assign the Trunk Access Code for outgoing call sent to the SMDR. For using Save & Repeat feature, this Trunk Access Code will be saved and sent with the calling number.	• YY=44 Trunk Access Code for Save & Repeat (1) 00-63: Trunk Route No. (2) 0-9/00-99: Trunk Access Code
CM08	Specify whether the calling number is sent to the OAI terminal or not.	(1) 462: Sending to OAI terminal (2) 0 : To send 1◀ : Not sent
	Specify whether the calling number is sent to the SMDR terminal or not.	(1) 463: Sending to SMDR terminal (2) 0 : To send 1◀ : Not sent
CMD000	Send ANI/Caller ID to SMDR. **Note:** *This is required when using AP00 card for SMDR.*	(1) 143: Sending to SMDR terminal (2) 0◀ : Not sent 1 : To send **Note:** *When 0 is set, the ANI is not sent to the SMDR, but area code for calling party, area code for called party; authorization code is sent to the SMDR.*
CM90	Provide the D^{term} with a select key of Calling Number Display or Calling Name Display.	• YY=00 (1) My Line No.+ $\boxed{,}$ +Key No. (2) F1099 : Select Key of Calling Number Display or Calling Name Display
	Provide the ATTCON/DESKCON with a select key of Calling Number Display or Calling Name Display.	• YY=00 (1) ATTCON No. (E000-E007)+ $\boxed{,}$ +Key No. (2) F6122 : Select Key of Calling Number Display or Calling Name Display
END		

6. Data Assignment for multiple CIR Trunk
   The development data by CMDC and CMDB are assigned toward the first CIR Trunk which has been assigned a minimum AP number. When providing multiple CIR Trunks, save the development data and load them for the other CIR Trunks according to the following steps. For detail of MAT Load/Save operations, refer to the Maintenance Manual.

Step 1 After assignment of CMDC and CMDB, save the office data by MAT.
At this time, specify the AREA Number including the MEMORY ADDRESS 00900-2FFFF.

Step 2 Set the MB switch to ON (UP) on the first CIR Trunk with minimum AP number X.

AP Number X< Y< Z< W

Step 3 As for the second CIR Trunk, change the AP number Y to X by CM05 and by the SENSE switch.

Step 4 Set the SW1-1 through SW1-4 to ON on the second CIR Trunk.
Clear the memory for CMDC and CMDB by CMDB YY=90.
Set the SW1-1 through SW1-4 to OFF on the second CIR Trunk.

Step 5 Load the office data saved in Step 1 by MAT.

Step 6 As for the second CIR Trunk, restore the AP number X to Y by CM05 and by the SENSE switch.

Jump to Step 17 if no more CIR Trunks are provided.

Step 7 Set the MB switch to ON (UP) on the second CIR Trunk with AP number Y.

Step 8 As for the third CIR Trunk, change the AP number Z to X by CM05 and by the SENSE switch.

Step 9 Set the SW1-1 through SW1-4 to ON on the third CIR Trunk.
Clear the memory for CMDC and CMDB by CMDB YY=90.
Set the SW1-1 through SW1-4 to OFF on the third CIR Trunk.

Step 10 Load the office data saved in Step 1 by MAT.

Step 11 As for the third CIR Trunk, restore the AP number X to Z by CM05 and by the SENSE switch.

Jump to Step 17 if no more CIR Trunks are provided.

Step 12 Set the MB switch to ON (UP) on the third CIR Trunk with AP number Z.

Step 13 As for the fourth CIR Trunk, change the AP number W to X by CM05 and by the SENSE switch.

Step 14 Set the SW1-1 through SW1-4 to ON on the fourth CIR Trunk.
Clear the memory for CMDC and CMDB by CMDB YY=90.
Set the SW1-1 through SW1-4 to OFF on the fourth CIR Trunk.

Step 15 Load the office data saved in Step 1 by MAT.

Step 16 As for the fourth CIR Trunk, restore the AP number X to W by CM05 and by the SENSE switch.

Step 17 Set the MB switches to OFF (DOWN) on all the CIR Trunks.

Hardware Required

COT card (4COTG/8COTQ)
CIR card (4RSTC)

CALLER ID DISPLAY

Programming

In addition to Automatic Number Identification (ANI) or Caller ID Class, assign the following data.

START	DESCRIPTION	DATA
CM90	Provide the D^{term} with a Caller ID Display key for displaying the ANI or Caller ID.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F5010: Caller ID Display
END		

To store the calling party name list in the MP card and display the name on D^{term} for incoming trunk calls, do the following programming.

Note: *This programming is effective only when the caller ID (name) is not stored in the CIR card by CMDB or a calling party name is not received from network.*

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A to each station.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Calling Name Display for incoming trunk calls in the Service Restriction Class A assigned by CM12 YY=02. **(Series 2100 software required)**	• YYY=136 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 0 : Calling Number Display 1◀ : Calling Name Display
CM35	Provide the trunk route with Calling Name Display for incoming calls. **(Series 2100 software required)**	• YYY=156 (1) 00-63: Trunk Route No. (2) 0: To provide
CM74	Assign the calling party number, which is used for Calling Name search, to the 1000-Slot Memory Block No. 3. **Note 1:** *When this feature is provided, the 1000-Slot Memory Block No. 3 cannot be used for Station Speed Dialing.* **Note 2:** *The calling party number must be the number received from network, including the area code.*	• Y=0 (1) 3 YY Z 3 : 1000-Slot Memory Block No. 3 **Note 1** YY: 10-Slot Memory Block No. 00-99 Z : Memory Parcel No. 0-9 (2) Stored No.: Access Code (Max. 4 digits) + $\boxed{,}$ + Calling Party No. (Max. 16 digits) **Note 2**
A		

	DESCRIPTION	DATA
A		
CM74	Assign the calling party name to be displayed for the calling party number assigned by CM74 Y=0, to each Memory Slot number, by character codes or characters.	• Y=1 (1) 3 YY Z 3 : 1000-Slot Memory Block No. 3 YY: 10-Slot Memory Block No. 00-99 Z : Memory Parcel No. 0-9 (2) XX...XX: Calling Party Name Character Code (Max. 32 digits, 16 characters) See APPENDIX B: CHARACTER CODE TABLE.
		• Y=2 (1) 3 YY Z 3 : 1000-Slot Memory Block No. 3 YY: 10-Slot Memory Block No. 00-99 Z : Memory Parcel No. 0-9 (2) XX...XX: Calling Party Name Character (Max. 16 characters)
CM90	Provide the D^{term} with a select key of Calling Number Display or Calling Name Display.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F1099: Select Key of Calling Number Display or Calling Name Display
	Provide the ATTCON/DESKCON with a select key of Calling Number Display or Calling Name Display.	• YY=00 (1) ATTCON No. (E000-E077) + $\boxed{,}$ + Key No. (2) F6122: Select Key of Calling Number Display or Calling Name Display
END		

Hardware Required

D^{term} with LCD and DLC card

CALLER ID - STATION

[Series 2200 (R3.1) software required]

Programming

START	DESCRIPTION	DATA
CM10	Assign the Caller ID sender (SDT) card number to the required LEN. **Note:** *The SDT card number must be assigned to the first LEN (Level 0) of each LT slot. Level 1-3 remain "NONE".*	(1) 000-763: LEN (2) C200-C203: SDT Card No.
	Assign the station number of an analog telephone for Caller ID - Station to the required LEN. **Note:** *The station number must be assigned to the first LEN (Level 0), second LEN (Level 1), third LEN (Level 2) and fourth LEN (Level 3) of each LT slot.*	(1) 000-763: LEN (2) X-XXXXXXXX: Station No.
CM04	Assign the purpose of the Caller ID sender.	• YY=01 (1) 02 (2) 0: Caller ID-Station
CM12	Specify the calling party information which is sent to the analog telephone for Caller ID - Station.	• YY=20 (1) X-XXXXXXXX: Station No. (2) 0: Calling Party Number 1: Calling Party Number and Calling Party Name
CM08	Specify whether the calling station number is sent to the analog telephone for Caller ID - Station when an internal call is terminated.	(1) 507 (2) 0 : Not sent 1◀: Sent
A		

	DESCRIPTION	DATA
A		
CM50	To call back from the analog telephone for Caller ID - Station, assign the access code to be added to the calling station number when an internal call is terminated.	• YY=00 (1) 8 (2) X-XXXX: Access Code to be added (Max.4 digits) X: 0-9, A (*), B (#)
CM08	Restrict One Hit Ringing for Call Forwarding-All Calls (to restrict all stations in the system).	(1) 266 (2) 0: Restricted
CM12	Assign Service Restriction Class C to each station (to restrict per Station Class).	• YY=07 (1) X-XXXXXXXX: Station No. (2) 00-15◀: Service Restriction Class C
CM15	Restrict One Hit Ringing for Call Forwarding-All Calls to Service Restriction Class C assigned by CM12 YY=07 (to restrict per Station Class).	• YY=81 (1) 00-15: Service Restriction Class C assigned by CM12 YY=07 (2) 0: Restricted
END		

By the following programming, the Caller ID sender can be set in make-busy or in-service status.

	DESCRIPTION	DATA
START		
CM45	Assign the make busy condition of the Caller ID sender.	• Y=5 (1) XXZ XX: 00-03: SDT Card No. assigned by CM10 Z: 0-3: Circuit No. (2) 0 : Make busy 1◀: In service
END		

Hardware Required

Analog telephone with LCD which supports Caller ID
SDT card (PN-4RSTF)
LLC card (PN-4LLCB)
FP card (PN-CP15) must be installed in PIM 0.
–48V Power Supply (PZ-PW122)

CAMP-ON

Programming

Camp-On (Transfer Method)

START	DESCRIPTION	DATA
CM08	Provide the system with the Camp-On by Station feature.	(1) 146 : Automatic Camp-On (2) 0 : Available (1) 147 : Manual Camp-On (Result of Switch Hook-Flash while hearing Busy Tone) (2) 0 : Special Dial Tone allowing use of Camp-On by Station access code
CM12	Assign the Service Restriction Class A for Camp-On to the required stations.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15◀ : Service Restriction Class A
CM15	Allow Camp-On (Transfer Method) in the Service Restriction Class A assigned by CM12 YY=02.	• YY=16 Transfer Method (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM08	Specify the Camp-On Tone sent to a busy station by Camp-On Transfer Method.	(1) 068 (2) 0 : Only once 1◀ : Every 4 seconds
CM41	Specify the timing for the Camp-On Recall Timer.	• Y=0 (1) 26 (2) 01-15: 8-128 sec. in 8 sec. increments If no data is set, the default setting is 24-32 seconds.
CM20	Assign an access code for Camp-On by Station (Transfer method).	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (*2) (2) A007: Camp-On by Station (Transfer method)
END		

Camp-On (Call Waiting Method)

START	DESCRIPTION	DATA
CM08	Provide the system with the Camp-On by Station feature.	(1) 146 : Automatic Camp-On (2) 0 : Available (1) 147 : Manual Camp-On (Result of Switch Hook Flash while hearing Busy Tone) (2) 0 : Special Dial Tone allowing use of Camp-On by access code
CM12	Assign the Service Restriction Class A for Camp-On to the required stations.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Call waiting in the Service Restriction Class A assigned by CM12 YY=02.	• YY=43 Call Waiting Method - Set from calling side • YY=44 Call Waiting Method - Answer from called side (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for Camp-On by Station (Call Waiting Method).	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX : Access Code (#2) (2) A125 : Camp-On by Station (Call Waiting Method)
END		

Note: *For the data assignment of the Answer key to answer a Camp-On call from a D^{term}, refer to ANSWER KEY on Page 27.*

When using a Single Digit Feature Access Code for Camp-On, add the following system data.

START

	DESCRIPTION	DATA
CM08	To activate the Single Digit Feature Access Code, set the data for 050, 051, 069 and 148 to “1”.	(1) 050 : * Button as Switch Hook Flash (2) 1◀ : Ineffective (1) 051 : # Button as Switch Hook Flash (2) 1◀ : Ineffective (1) 069 : Single Digit Dialing on BT Connection (2) 1◀ : Step Call (1) 148 : Same Last Digit Redialing on BT Connection (2) 1◀ : Ineffective
	Provide the System with the Single Digit Feature Access Code on BT Connection.	(1) 208 (2) 0: Available

END

CENTREX COMPATIBILITY

Programming

In addition to the programming of DIRECT OUTWARD DIALING (DOD) (refer to Page 240), do the following programming.

START

	DESCRIPTION	DATA
CM35	Assign the Centrex Trunk function to the required trunk routes.	• YY=86 (1) 00-63 : Trunk Route No. (2) 0 : Centrex Trunk
	Provide the capability for sending a hook flash signal to the Centrex.	• YY=16 (1) 00-63 : Trunk Route No. (2) 1◀ : Sending
CM20	Assign the access code for sending a hook flash signal to the Centrex Line from a PB Single-Line Telephone.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX : Access Code (2) A158
CM93	Assign the Centrex Trunk as a Prime Line to the desired D^{term} extension.	(1) X-XXXXXXXX : My Line No. (2) D000-D255 : Trunk No. (3)

END

CID CALL BACK

[Series 2300 (R4.1) software required]

Programming

START	DESCRIPTION	DATA
CM08	Specify Message Waiting Lamp indication on the D^{term} to which Message Waiting/Message Reminder is set.	(1) 294 (2) 0 : Flashing 60 IPM 1◀: Steady Lighting
	Specify the time display for Message Waiting/ Message Reminder on D^{term} with LCD.	(1) 280 (2) 0 : 24-Hour 1◀: 12-Hour
	Provide the system with CID Call Back.	(1) 493 (2) 0: To provide
CM13	Provide each D^{term} with Message Waiting.	• YY=03 (1) X-XXXXXXXX: Station No. (2) 0: To provide
CM12	Assign the Service Restriction Class A for CID Call Back to the required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow CID Call Back in the Service Restriction Class A assigned by CM12 YY=02.	• YYY=126 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 0: Allow
A		

	DESCRIPTION	DATA
A		
CM35	Provide the trunk route with the CID Call Back.	• YYY=150 (1) 00-63: Trunk Route No. (2) 0: To provide
	Assign the trunk access code for CID Call Back. This trunk access code will be saved and sent with the calling number.	• YY=44 (1) 00-63: Trunk Route No. (2) 0-9/00-99: Trunk Access Code
CM29	Assign a Numbering Plan Group number to each tenant.	(1) 00-63: Tenant No. (2) 710-713: Numbering Plan Group 0-3
CM20	Assign the access code for Message Waiting/ Message Reminder Search/Retrieve/Set/ Cancel.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A146: Message Waiting Search A147: Message Waiting Retrieve A148: Message Reminder Set A149: Message Reminder Cancel
CM12	Assign the number of memory block which is used for CID Call Back for each D$^{\mathrm{term}}$ station. **Note 1:** *The memory block cannot be used in common by multiple stations. Set the memory block to each D$^{\mathrm{term}}$ station respectively.* **Note 2:** *CM12 YY=38 is not effective for a Single Line Station/Virtual Line Station/PS.*	• YY=38 (1) X-XXXXXXXX: Station No. (2) XXXX ZZ XXXX: 0000-1016: Start Block No. ZZ: Number of Memory Block for CID Call Back 01: 8 blocks 02: 16 blocks 03: 24 blocks NONE◀: 4 blocks
CM13	Provide the function to register the calling number into the Redial key on the D$^{\mathrm{term}}$ when the call is answered, for the required station.	• YY=41 (1) X-XXXXXXXX: Station No. (2) 0: To provide
CM90	Assign the Message Waiting Search key to the D$^{\mathrm{term}}$s.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0A46: Message Waiting Search
END		

Hardware Required

D$^{\mathrm{term}}$ with LCD and DLC card

CID CALL ROUTING

[Series 2300 (R4.1) software required]

Programming

For DID on ISDN, T1-ANI, MFC incoming calls, see Sample Data Programming 1 on Page 148-8.

START	DESCRIPTION	DATA
CM35	Provide the incoming trunk route with digit conversion.	• YY=18 (1) 00-63: Trunk Route No. (2) 0: To provide
	Specify the Development Table for digit conversion. **Note:** *The Development Table 1 is available when the Expansion Memory card (PZ-M537) is mounted on the MP card.*	• YYY=170 (1) 00-63: Trunk Route No. (2) 0 : Development Table 1 3◀: Development Table 0
CM76	Assign the Number Conversion Block number for Development Table 0.	• YY=00 (1) X-XXXX: DID No./Called No. (2) 000-999: Number Conversion Block No. **Note 1, Note 2**

Note 1: *When the Expansion Memory card (PZ-M537) is not mounted on the MP card, the 2nd data is 000-499.*

Note 2: *When the Number Conversion Block number is assigned for CID Call Routing, do not use the same Number Conversion Block number for the DID feature.*

	Assign the Number Conversion Block number for Development Table 1.	• YY=90 (1) X-XXXXXXXX: DID No./Called No. (2) 000-999: Number Conversion Block No. **Note 1, Note 2**

Note 1: *CM76 YY=90 is available only when the Expansion Memory card (PZ-M537) is mounted on the MP card.*

Note 2: *When the Number Conversion Block number is assigned for CID Call Routing, do not use the same Number Conversion Block number for the DID feature.*

A

A

	DESCRIPTION	DATA
CM76	Provide the calling number development and specify its Development Pattern for each Number Conversion Block number assigned by CM76 YY=00/90. **Note:** *For non-DID on ISDN, Caller ID calls, this data is not effective and the data setting of CM35 Y=174 is effective.*	• YY=26 (1) 000-999: Number Conversion Block No. assigned by CM76 YY=00/90 (2) 0: To provide (Using Development Pattern 0) 1: To provide (Using Development Pattern 1) 2: To provide (Using Development Pattern 2)
CM2A	Assign the Development Block number for each calling party number.	• YY=50 Development Pattern 0 assigned by CM76 YY=26 • YY=51 Development Pattern 1 assigned by CM76 YY=26 • YY=52 Development Pattern 2 assigned by CM76 YY=26 (1) X-XX....XX: Calling Party No. (Max. 16 digits) X: 0-9 (2) 000-999: Development Block No. **Note** **Note:** *Set the different number from the Number Conversion Block number assigned by CM76 YY=00/90.*
CM65	Select the two kinds of mode change or the four kinds of mode change per each tenant.	• YY=29 (1) 00-63: Tenant No. (2) 0 : Two kinds of mode (Day Mode, Night Mode) 1◀: Four kinds of mode (Day Mode, Night Mode, Mode A, Mode B)
CM76	Assign the station tenant for each calling party number.	• YY=09 (1) 000-999: Development Block No. assigned by CM2A YY=50/51/52 (2) 00-63: Station Tenant No.

B

	DESCRIPTION	DATA
B		
CM76	Assign the data for interpreting the digits received. **Note:** *Day/Night Mode, Mode A/B can be specified according to following conditions.* *1st priority:* *Specified by tenant number for each calling party number (CM76 YY=09)* *2nd priority:* *Specified by trunk tenant number (CM30 YY=01)* *3rd priority:* *Specified by tenant number for each DID number (CM76 YY=09)*	• YY=01 Day Mode • YY=02 Night Mode • YY=03 Mode A • YY=04 Mode B (1) 000-999: Development Block No. assigned by CM2A YY=50/51/52 (2) X-XXXXXXXX: Station No. to be terminated DXX: Change Terminating System to: D02: Trunk-Direct Appearances D03: Trunk-Direct Appearances + TAS D04: Direct-In Termination D09: Automated Attendant D10: Attendant Console + TAS D11: Attendant Console + Trunk-Direct Appearances D12: Attendant Console + Trunk-Direct Appearances + TAS D13: TAS D14: Attendant Console D16: DISA
	When CM76 YY=01/02/03/04 is set to "D13" (TAS), assign the terminating tenant for Day/Night Mode, Mode A/B per each calling party number.	• YY=05 Day Mode • YY=06 Night Mode • YY=07 Mode A • YY=08 Mode B (1) 000-999: Development Block No. assigned by CM2A YY=50/51/52 (2) 00-63: Trunk Tenant No.

Note: *When setting the other CM76 data (YY=10, 11, 13-16, 18-25) for the Development Block number assigned by CM2A YY=50/51/52, these settings are also effective for each calling party number.*

END

For non-DID on ISDN, Caller ID incoming calls, see Sample Data Programming 2 on Page 148-9.

Note 1: *When a Called Party Sub-address is received from an ISDN subscriber, CID Call Routing is not effective.*
Note 2: *When activating CID Call Routing for a Caller ID trunk, do not assign CMDB YY=01, YY=02.*

START	DESCRIPTION	DATA
CM35	Provide the calling number development and specify its Development Pattern for each trunk route number. **Note:** *For DID on ISDN, T1-ANI, MFC calls, this data is not effective and the data setting of CM76 YY=26 is effective.*	• YYY=174 (1) 00-63: Trunk Route No. (2) 0: To provide (Using Development Pattern 0) 1: To provide (Using Development Pattern 1) 2: To provide (Using Development Pattern 2)
CM2A	Assign the Development Block number for each calling party number.	• YY=50 Development Pattern 0 assigned by CM35 YYY=174 • YY=51 Development Pattern 1 assigned by CM35 YYY=174 • YY=52 Development Pattern 2 assigned by CM35 YYY=174 (1) X-XX....XX: Calling Party No. (Max. 16 digits) X: 0-9 (2) 000-999: Development Block No.
CM65	Select the two kinds of mode change or the four kinds of mode change per each tenant.	• YY=29 (1) 00-63: Tenant No. (2) 0 : Two kinds of mode (Day Mode, Night Mode) 1◀: Four kinds of mode (Day Mode, Night Mode, Mode A, Mode B)
CM76	Assign the station tenant for each calling party number.	• YY=09 (1) 000-999: Development Block No. assigned by CM2A YY=50/51/52 (2) 00-63: Station Tenant No.
A		

A

	DESCRIPTION	DATA
CM76	Assign the data for interpreting the digits received. **Note:** *Day/Night Mode, Mode A/B can be specified according to following conditions.* *1st priority:* *Specified by tenant number for each calling party number (CM76 YY=09)* *2nd priority:* *Specified by trunk tenant number (CM30 YY=01)*	• YY=01 Day Mode • YY=02 Night Mode • YY=03 Mode A • YY=04 Mode B (1) 000-999: Development Block No. assigned by CM2A YY=50/51/52 (2) X-XXXXXXXX: Station No. to be terminated DXX: Change Terminating System to: D02: Trunk-Direct Appearances D03: Trunk-Direct Appearances + TAS D04: Direct-In Termination D09: Automated Attendant D10: Attendant Console + TAS D11: Attendant Console + Trunk-Direct Appearances D12: Attendant Console + Trunk-Direct Appearances + TAS D13: TAS D14: Attendant Console D16: DISA
	When CM76 YY=01/02/03/04 is set to "D13" (TAS), assign the terminating tenant for Day/Night Mode, Mode A/B per each calling party number received on DID call.	• YY=05 Day Mode • YY=06 Night Mode • YY=07 Mode A • YY=08 Mode B (1) 000-999: Development Block No. assigned by CM2A YY=50/51/52 (2) 00-63: Trunk Tenant No.

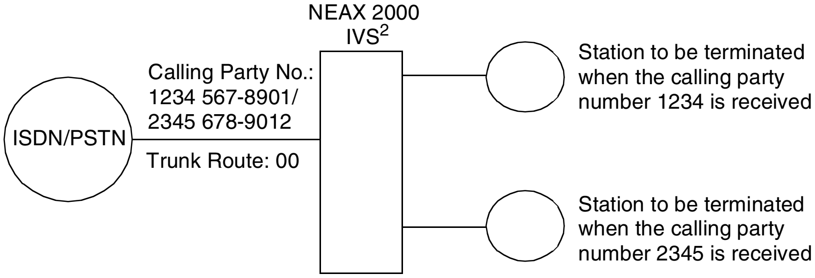
Note: *When setting the other CM76 data (YY=10, 11, 13-16, 18-25) for the Development Block number assigned by CM2A YY=50/51/52, these settings are also effective for each calling party number.*

END

Sample Data Programming 1

Example for DID on ISDN, T1-ANI, MFC incoming calls:

• DID No.:	0123 456-7890
• Trunk Route No.:	00
• Calling Party No.:	1234 567-8901 2345 678-9012
• Terminating System:	TAS (Day Mode) when the number 1234 is received Direct-In Termination (Day Mode) when the number 2345 is received
• Station Tenant No.:	01
• Trunk Tenant No.:	01


NEAX 2000
IVS2
Calling Party No.:
1234 567-8901/
2345 678-9012
ISDN/PSTN
Trunk Route: 00
Station to be terminated when the calling party number 1234 is received
Station to be terminated when the calling party number 2345 is received

When the number assigned by CM2A corresponds with the upper digits of the calling party number, the call terminates with the specified terminating system.

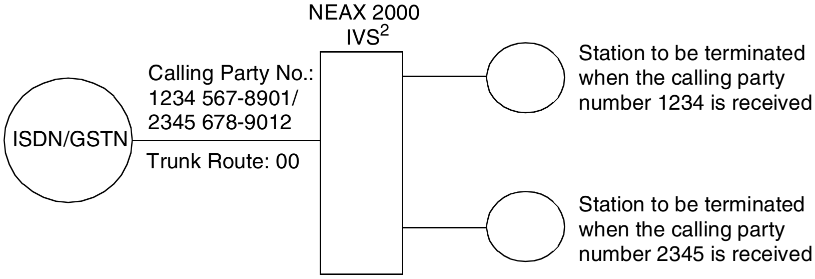
Data Programming

COMMAND	1ST DATA	2ND DATA	REMARKS
CM30 YY=00	000	00	Assign the trunk route number 00 to the trunk number 000.
CM30 YY=02	000	18	Set the ISDN Indial for the incoming calls.
CM35 YY=12	00	3	Assign the number of digits to be received on DID to four digits.
CM35 YY=18	00	0	Provide the trunk route number 00 with digit conversion.
CM76 YY=00	7890	000	Assign the Number Conversion Block number 000 to the DID number 7890.
CM76 YY=26	000	0	Provide the calling number development with the Development Pattern 0 to the Number Conversion Block number 000.
CM2A YY=50	1234	010	Assign the Development Block number 010 for the calling party number 1234.
CM2A YY=50	2345	011	Assign the Development Block number 011 for the calling party number 2345.
CM76 YY=01	010	D13	Assign TAS in Day Mode to the Development Block number 010.
CM76 YY=01	011	D04	Assign Direct-In Termination in Day Mode to the Development Block number 011.
CM76 YY=09	010	01	Assign the station tenant number 01 to the Development Block number 010.
CM76 YY=05	010	01	Assign the trunk tenant number 01 to the Development Block number 010.

Sample Data Programming 2

Example for non-DID on ISDN, Caller ID incoming calls:

• Calling Party No.:	1234 567-8901 2345 678-9012
• Trunk Route No.:	00
• Terminating System:	TAS (Day Mode) when the number 1234 is received Direct-In Termination (Day Mode) when the number 2345 is received
• Station Tenant No.:	01
• Trunk Tenant No.:	01


NEAX 2000
IVS^2
Calling Party No.:
1234 567-8901/
2345 678-9012
ISDN/GSTN
Trunk Route: 00
Station to be terminated when the calling party number 1234 is received
Station to be terminated when the calling party number 2345 is received

When the number assigned by CM2A corresponds with the upper digits of the calling party number, the call terminates with the specified terminating system.

Data Programming

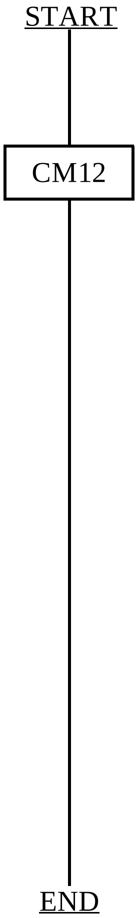
COMMAND	1ST DATA	2ND DATA	REMARKS
CM35 YYY=174	00	0	Provide the calling number development with the Development Pattern 0 for trunk route number 00.
CM2A YY=50	1234	020	Assign the Development Block number 020 for the calling party number 1234.
CM2A YY=50	2345	021	Assign the Development Block number 021 for the calling party number 2345.
CM76 YY=01	020	D13	Assign TAS in Day Mode to the Development Block number 020.
CM76 YY=01	021	D04	Assign Direct-In Termination in Day Mode to the Development Block number 021.
CM76 YY=09	020	01	Assign the station tenant number 01 to Development Block number 020.
CM76 YY=05	020	01	Assign the trunk tenant number 01 to Development Block number 020.

This page is for your notes.

CLASS OF SERVICE

Programming

To assign the Telephone Class:



DESCRIPTION

Assign the Telephone Class to each station.

DATA

- YY=00 Type of Telephone

(1) X-XXXXXXXX: Station No.
(2) 1 : DP (Rotary Dial Telephone)
2 : DTMF (Push Button Telephone)
3◀ : DTMF/DP

- YY=03 Telephone Class

(1) X-XXXXXXXX: Station No.
(2) 00 : House Phone 0
01 : House Phone 1
02 : House Phone 2
03 : House Phone 3
04 : Hot Line
05 : Automatic Intercom
06 : Manual Intercom
07 : Dial Intercom
08 : Attendant Position Loop Line
15◀ : Ordinary Station

To assign the Trunk Restriction Class:

START

	DESCRIPTION	DATA
CM12	Assign the Trunk Restriction Class to each station.	• YY=01 Trunk Restriction Class (1) X-XXXXXXXX: Station No. (2) X Z X: 1◀ -8: Trunk Restriction Class in Day Mode Z: 1◀ -8: Trunk Restriction Class in Night Mode 1: Unrestricted (RCA) 2: Non-Restricted 1 (RCB) 3: Non-Restricted 2 (RCC) 4: Semi-Restricted 1 (RCD) 5: Semi-Restricted 2 (RCE) 6: Restricted 1 (RCF) 7: Restricted 2 (RCG) 8: Fully-Restricted (RCH)
CM35	Set the Outgoing/Incoming Trunk Route Restriction Data by Trunk Restriction Classes (RCA-RCH).	• YY=51-58 Outgoing Trunk Restriction Data • YY=61-68 Incoming Trunk Restriction Data (1) 00-63 : Trunk Route No. (2) 0 : Restricted 1◀ : Allow

END

To assign the Service Restriction Class:

START	DESCRIPTION	DATA
CM12	Assign the required Service Restriction Class to each station. Service Restriction categories for each class are specified by CM15.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX : 00-15◀ :Service Restriction Class A ZZ : 00-15◀ :Service Restriction Class B • YY=07 (1) X-XXXXXXXX: Station No. (2) 00-15◀: Service Restriction Class C
CM15	Specify the service features in each Service Class A, B, and C. **Note:** *For details, refer to the Command Manual.*	(1) 00-15: Service Restriction Class A, B, C (2) 0 : **Note** 1◀ : **Note**
END		

CODE RESTRICTION

Programming

START

	DESCRIPTION	DATA
CM08	Provide the system with the Tol1 Restriction feature for an outgoing call by System Speed Dialing/Station Speed Dialing, if desired.	(1) 035: Station Speed Dialing (2) 0 : Not provided 1◀ : To provide (1) 044: System Speed Dialing (2) 0 : Not provided 1◀ : To provide
	Provide the system with Toll Diversion or Toll Denial.	(1) 119 (2) 0 : Toll Diversion (Routed to the “ICPT” key on the ATTCON) 1◀ : Toll Denial (Routed to Reorder Tone)
CM12	Assign a Trunk Restriction Class to each station.	• YY=01 (1) X-XXXXXXXX: Station No. (2) X Z: Trunk Restriction Class X: 1-8: In Day Mode Z: 1-8: In Night Mode 1◀ : Unrestricted (RCA) 2 : Non-Restricted 1 (RCB) 3 : Non-Restricted 2 (RCC) 4 : Semi-Restricted 1 (RCD) 5 : Semi-Restricted 2 (RCE) 6 : Restricted 1 (RCF) 7 : Restricted 2 (RCG) 8 : Fully-Restricted (RCH)
CM35	Assign the data for Dial Pulse sending to the Route number assigned.	• YY=08 Dial Pulse Sending (1) 00-63: Trunk Route No. (2) 3◀ : To send
	Provide the Toll Restriction feature to the required trunk routes.	• YY=11 (1) 00-63: Trunk Route No. (00) (2) 0 : To provide
	Specify outgoing route access capability for each restriction class.	• YY=51-58 (1) 00-63: Trunk Route No. (2) 0 : Restricted 1◀ : Allow
	Assign the Area Code Development Pattern number for Toll Restriction and Maximum Digit Analysis to each trunk route.	• YY=76 (1) 00-63: Trunk Route No. (2) 00-04: Area Code Development Pattern No. 0-4

A

A

DESCRIPTION	DATA

CM81

Assign the Toll Restriction Patterns with eight kinds of Trunk Restriction Classes assigned by CM12 YY=01. Toll Restriction Pattern 00-15 are preassigned as shown below. If a new Restriction Pattern is required, change the data for Restriction Patterns 01-13 (00, 14 and 15 are fixed).

- YY=01-13 Toll Restriction Pattern No. 01-13

(1) 1-8 : Trunk Restriction Class
(2) 0 : Restricted
3 : Allowed

Y																	
TRUNK RESTRICTION CLASS		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	00
		TOLL RESTRICTION PATTERN NUMBER ON EACH TRUNK RESTRICTION CLASS															
		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	00
1	RCA	3	0	3	3	3	0	0	0	3	3	3	3	3	0	3	0
2	RCB	3	0	3	3	0	0	0	03	3	3	0	0	0	0	3	0
3	RCC	3	0	3	0	0	0	0	0	3	0	0	0	0	0	3	0
4	RCD	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
5	RCE	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
6	RCF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
7	RCG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
8	RCH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0

0: Restricted
3: Allowed

CM85

Specify the maximum number of digits to be dialed during an outgoing call. The maximum number of digits, including the area codes, should be assigned to each area code.

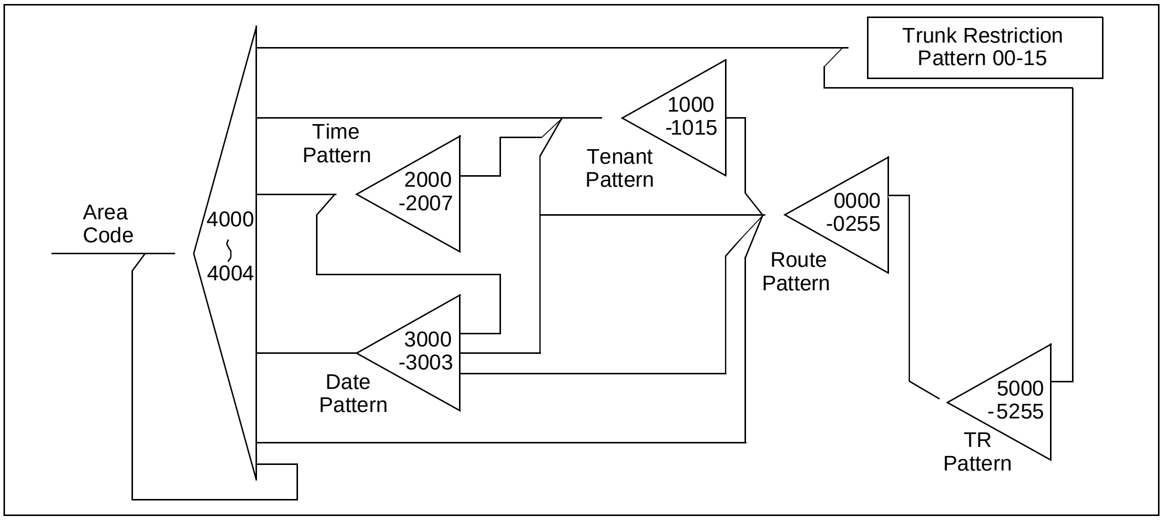
- Y=0-4 Area Code Development Pattern No. 0-4 assigned by CM35 YY=76

(1) X-X...X : Area Code dialed, Max. 8 digits
(2) 01-24◀ : 1 digit-24 digits
25-79 : 25-79 digits

B

B

	DESCRIPTION	DATA
CM8A	Assign the area code to be restricted and the Trunk Restriction Pattern number assigned by CM81 to the Area Code Development Pattern number assigned by CM35 YY=76. For example, to provide the Trunk Restriction Class “RCB, RCC, RCD, and RCE” with the Toll Restriction for Area Code “00”: • Area Code =00 • Trunk Restriction Pattern =05 **Note:** *See Toll Restriction Pattern Table on CM81.* If the Toll Restriction Pattern for the same area code is changed according to the Tenant, Date, and Time, assign the required patterns (Tenant, Date, and Time) to the area code.	• YYYY=4000-4004 Area Code Development No. 0-4 (1) Area Code (Max. 8 digits) (2) B000-B015: Trunk Restriction Pattern 00-15 **Note:** *For details of Resident System Program, refer to the Command Manual.*



C

C

CM8A

To add a Tenant Pattern:

	DESCRIPTION	DATA
Step 1	Assign the area code to be restricted and a Tenant Pattern number to the Area Code Development Pattern number assigned by CM35 YY=76.	• YYYY=4000-4004 Area Code Development Pattern No. 0-4 (1) Area Code (Max. 8 digits) (2) 1000-1015: Tenant Pattern No. 00-15
Step 2	Assign a Tenant number and the Route Pattern number to the Tenant Pattern number assigned by Step 1.	• YYYY=1000-1015 Tenant Pattern No. 00-15 (1) 00-63: Tenant No. 00-63 (2) 0000-0255: Route Pattern No. 000-255
Step 3	Assign a TR Pattern number to the Route Pattern number assigned by Step 2.	• YYYY=0000-0255 Route Pattern No. 000-255 (1) 1 (2) XXX 00 XXX: 000-255: TR Pattern No.
Step 4	Assign a Trunk Restriction Pattern number assigned by CM81 to the TR Pattern number assigned by Step 3.	• YYYY=5000-5255 TR Pattern No. (1) 000 (2) 00-15◀ : Trunk Restriction Pattern No. 00-15

To add a Time and Date Pattern:

	DESCRIPTION	DATA
Step 1	Assign the area code to be restricted and a Date Pattern number to the Area Code Development Pattern number assigned by CM35 YY=76.	• YYYY=4000-4004 (1) Area Code (Max. 8 digits) (2) 3000-3003: Date Pattern No. 0-3
Step 2	Assign a date and Time Pattern No. 0-7 to the Date Pattern number assigned by Step 1. Set the data for all dates, one by one, for which Toll Restriction is to be applied.	• YYYY=3000-3003 Date Pattern No. 0-3 (1) 0-6 (Date) 0: Sunday 1: Monday 2: Tuesday 3: Wednesday 4: Thursday 5: Friday 6: Saturday (2) 2000-2007: Time Pattern No. 0-7

D

D

	DESCRIPTION	DATA
Step 3	Assign the starting time for the Toll Restriction and Route Pattern number to the Time Pattern number assigned by above Step 2. Set the Starting Time as shown below.	• YYYY=2000-2007 Time Pattern No. 0-7 (1) HHMM (Time to Change) HH : 00-23: Hours MM : 00/30: Minutes (2) 0000-0255: Route Pattern No. 000-255 If Tenant Pattern is required, set 1000-1015 (Tenant Pattern No. 00-15).
Note:	*Two times must be set. The first to start Toll Restriction and the second to stop it (or change it back).*	
Step 4	Assign the TR Pattern number to the Route Pattern number assigned by Step 3.	• YYYY=0000-0255 Route Pattern No. 000-255 (1) 1 (2) XXX 00 XXX: 000-255: TR Pattern No.
Step 5	Assign the Trunk Restriction Pattern number assigned by CM81 to the TR Pattern number assigned by Step 4.	• YYYY=5000-5255 TR Pattern No. 000-255 (1) 000 (2) 00-15◀ : Trunk Restriction Pattern No. 00-15

END

CONFERENCE (THREE/FOUR PARTY)

Programming

START	DESCRIPTION	DATA
CM08	Provide the system with Three-Party Conference.	(1) 101 (2) 1◀ : Three-Party Conference among stations (1) 102 (2) 0: As per CM08>101 (1) 103 (2) 0: As per CM08>104 (1) 104 (2) 1◀ : Three-Party Conference among stations and trunk call
	Provide the system with a four-party conference.	(1) 246 (2) 1◀ : Four Party Conference
	Note: *This feature can only be activated from a* D^{term}.	
CM45	Make the Conference trunk on the MP card in service.	• Y=6 Make Busy (1) 00-15: MP built-in CFT Circuit No. (2) 1◀ : In service • Y=7 Purpose of CFT (1) 00-15: MP built-in CFT Circuit No. (2) 1◀ : For both attendant an station
END		

CONFERENCE (SIX/TEN PARTY)

Programming

To use this feature by dialing the feature access code:

START	DESCRIPTION	DATA
CM10	Assign the card number of the Conference trunk (CFT card) to the required LEN. **INITIAL** **Note:** *The CFT card number must be assigned to the first LEN (Level 0) of each LT slot.*	(1) 000-763 : LEN (2) ED00-ED03: CFT Card No.
CM12	Assign the Service Restriction Class B for Conference leader.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ ZZ : 00-15 ◀ :Service Restriction Class B
CM15	Allow Conference trunk access for Conference leader in the Service Restriction Class B assigned by CM12 YY=02.	• YY=69 Conference Leader (1) 00-15 : Service Restriction Class B assigned by CM12 YY=02 (2) 1 ◀ : Allow
CM20	Assign the access codes for Conference.	• Y=0-3 (1) X-XXXX : Access code (2) A159 : 6-party Conference Trunk Access A160 : 10-party Conference Trunk Access A161 : Connecting participant to CFT card A162 : Forced release of participant
END		

To use this feature by using the feature keys assigned on the D$^{\text{term}}$:

START	DESCRIPTION	DATA
CM90	Assign the feature key for Six/Ten-Party Conference, on the D$^{\text{term}}$ of the Conference leader.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0A85 :6-party conference F0A86 :10-party conference
	Assign maximum of 6 or 10 Multiple Line keys on the D$^{\text{term}}$ of the Conference leader.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) X-XXXXXXXX: Multiple Line No.
CM12	Specify the Multiple Line number set by CM90 to be accommodated to D$^{\text{term}}$.	• YY=05 (1) X-XXXXXXXX: Multiple Line No. (2) 0: Accommodated
CM10	Assign the card number of the Conference trunk (CFT card) to the required LEN. **INITIAL** **Note:** *The CFT card number must be assigned to the first LEN (Level 0) of each LT slot.*	(1) 000-763: LEN (2) ED00-ED03: CFT Card No.
CM12	Assign the Service Restriction Class B for Conference leader.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ ZZ: 00-15 ◀ :Service Restriction Class B
CM15	Allow Conference trunk access for Conference leader in the Service Restriction Class B assigned by CM12 YY=02.	• YY=69 Conference Leader (1) 00-15 : Service Restriction Class B assigned by CM12 YY=02 (2) 1 ◀ : Allow
END		

CONFERENCE (32-PARTY)

(Series 2100 software required)
Programming

Conference (32-Party) allows a station user or an outside party to establish a conference by Group Call or to attend a conference by Meet-Me Conference.
To provide Group Call or Meet-Me Conference, do the Conference Trunk Assignment at first.

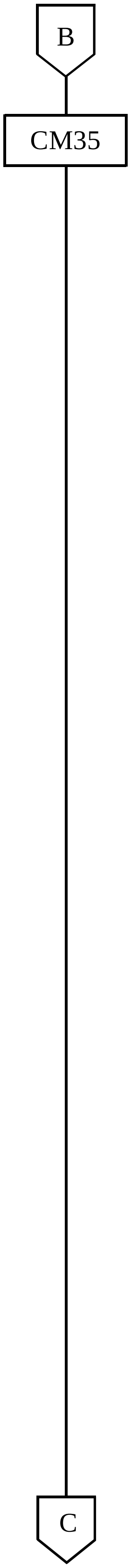
Conference Trunk Assignment:

START	**DESCRIPTION**	**DATA**
CM05	Assign an AP number to the CFTC card. The AP number assigned must match the SENSE switch setting on the CFTC card. **INITIAL**	• Y=0 (1) 04-15, 20-31: AP No. (2) 09: CFTC card
	Select the AP Highway Channel for the CFTC card. **INITIAL**	• Y=1 (1) 04-15, 20-31: AP No. (2) 0 : Use Expanded Highway Channel (128 Time Slots) 1 ◀ : Use Basic Highway Channel (128 Time Slots)
CM07	Assign trunk numbers to each Channel Number on the CFTC card. **INITIAL** **Note 1:** *The lowest to highest trunk number must be assigned to the lowest to highest Channel Number of CFTC.* **Note 2:** *The system allocates Time Slots to consecutive channels from lowest to highest Channel Number assigned. To minimize the number of Time Slots allocated, assign trunk numbers to the consecutive channels on each card. Never skip channels in this command.*	• YY=01 (1) XX ZZ XX: 04-15, 20-31: AP No. assigned by CM05 Y=0 ZZ: 00-31: Channel No. of CFTC (2) D000-D255: Trunk No. Any trunk No. already assigned by CM10 cannot be used.
A		

A

	DESCRIPTION	**DATA**
CMAA	Specify the conference trunk partition. **CFT INITIAL**	• YY=10 (1) 04-15, 20-31: AP No. assigned by CM05 Y=0 (2) 0 : Four 8-Party Conference groups (8+8+8+8) 1 : One 16-Party Conference group and two 8-Party Conference groups (16+8+8) 2 : Two 16-Party Conference groups (16+16) 3 ◀ : One 32-Party Conference group (32)
CM30	Assign a trunk route number to each conference trunk. The conference trunk route must be separated from any other analog/digital trunk route.	• YY=00 (1) 000-255: Trunk No. assigned by CM07 YY=01 (2) 00-63 : Trunk Route No.

B



DESCRIPTION	DATA
Assign the trunk route data to the route number assigned by CM30 YY=00.	• YY=00 Kind of Trunk Route (1) 00-63: Trunk No. (2) 04 : Tie line trunk
	• YY=01 Dialing signal type (1) 00-63: Trunk Route No. (2) 2 : DP 10PPS
	• YY=05 Release signal from distant office (1) 00-63: Trunk Route No. (2) 1 ◀ : Release signal arrives
	• YY=09 Incoming connection signaling (1) 00-63: Trunk Route No. (2) 06 : 2nd DT/Timing Start-Tie line
	• YY=04 Answer signal from distant office (1) 00-63: Trunk Route No. (2) 2 : Answer signal arrives (Tie Line)
	• YYY=159 32-Party Conference trunk (1) 00-63: Trunk Route No. (2) 0 : To provide
	• YY=14 SMDR for outgoing call (1) 00-63: Trunk Route No. (2) 0 : Not provided
Note: *Be sure to set the PAD for the conference trunk by CM42, for outside participants.*	• YY=19 PAD control of CFTC (1) 00-63: Trunk Route No. (2) 0-3 : Programmable PAD (See CM42) 4-7 ◀ : Not used

C

	DESCRIPTION	**DATA**
CM42	To use the programmable PAD (CM35 YY=19, 2nd Data =0-3), assign the PAD data by CM42.	(1) 50-65: See the table below. (2) 00-15: See the table below.

PATTERNS / 1ST DATA	**PAD DATA PATTERNS**				**CONNECTING PATTERNS (A TRUNK-B TRUNK)**
	CM35 YY=19 2ND DATA=0	**CM35 YY=19 2ND DATA=1**	**CM35 YY=19 2ND DATA=2**	**CM35 YY=19 2ND DATA=3**	
50 ~ 65	50	54	58	62	STA/TONE-CFTC
	51	55	59	63	COT/DID/LDT-CFTC
	52	56	60	64	ODT-CFTC
	53	57	61	65	DTI/BRT/CCT/PRT-CFTC

PATTERNS / 2ND DATA		**PAD DATA OF CFTC (T/R) [dB]**
00 ~ 15	00	0/0
	01	0/-4
	02	0/-8
	03	0/+4
	04	-3/0
	05	-3/-4
	06	-3/-8
	07	-3/+4
	08	-6/0
	09	-6/-4
	10	-6/-8
	11	-6/+4
	12	-9/0
	13	-9/-4
	14	-9/-8
	15	-9/+4

T/R : Transmitter PAD/Receiver PAD
+ : Gain
– : Loss

END

Group Call

Group Call includes three kinds of conference: Group Call-Automatic Conference, Group Call-Broadcasting, and Group Call-Two Way Calling.

Do the following programming in addition to the Conference Trunk Assignment on Page 160.

START	DESCRIPTION	DATA
CM57	Assign the participant numbers (not including the conference leader) for each conference group. **Note 1:** *Assign the following participant numbers as the first data.* *• 8-Party Conference: 00-06* *• 16-Party Conference: 00-14* *• 32-Party Conference: 00-30* **Note 2:** *C (fixed pause), D (programmable pause) can be assigned.* **Note 3:** *The maximum number of simultaneous calling for single line stations/PSs is 12 per FP. When the number of single line stations/PSs exceeds 12, allocate the rest of participant stations to another FP. For a D^{term} (My Line/Virtual Line), there is no limit of the above.*	• YY=00-07 Group No. 0-7 (1) 00-30: Participant No. **Note 1** (2) X-X....X: Participant Station No. Trunk Access Code + Participant No. LCR Access Code + Participant No. Max. 16 digits **Note 2**
CM29	Assign a Numbering Plan Group number to each tenant.	(1) 00-63: Tenant No. (2) 710-713: Numbering Plan Group 0-3
CM20	Assign the access code for LCR Group 0-3.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A126: LCR Group 0 A127: LCR Group 1 A128: LCR Group 2 A129: LCR Group 3
A		

A	DESCRIPTION	DATA
CM8A	Assign an Area Code Development Pattern number to each LCR Group.	• YYYY=A000 (1) 0-3: LCR Group 0-3 (2) 4000-4007: Area Code Development Pattern No. 0-7
	Assign a Route Pattern number to each area code (Conference Access Code) for the Area Code Development Pattern number assigned by CM8A YYYY=A000.	• YYYY=4000-4007 Area Code Development Pattern No. 0-7 (1) X...X: Area Code (Conference Access Code), Max. 8 digits (2) 0000-0255: Route Pattern No. 000-255
	Specify the order of LCR selection for the Route Pattern number assigned by CM8A YYYY=4000-4007.	• YYYY=0000-0255 Route Pattern No. 000-255 (1) 1-4: Order of LCR Selection 1: 1st 2: 2nd 3: 3rd 4: 4th (2) XXX ZZ XXX: 000-255: LCR Pattern No. 000-255 ZZ : 00-63: Trunk Route No. 00-63 assigned by CM30 YY=00
	Delete all digits of the area code (Conference Access Code) assigned by CM8A YYYY=4000-4007.	• YYYY=5000-5255 LCR Pattern No. 000-255 (1) 152 : All digits of Conference Access Code to be deleted (2) 0 : To delete
B		

B

	DESCRIPTION	DATA
CM8A	To add the kind of conference and the group number, designate the digits to be added.	• YYYY=5000-5255 LCR Pattern No. 000-255 (1) 100: Designation of Digit Addition Pattern No. (2) 9000-9255: Digit Addition Pattern No. 000-255
		• YYYY=9000-9255 Digit Addition Pattern No. 000-255 (1) 0 (2) X ZZ: Digits to be added X: Kind of Conference 0 : Group Call-Automatic Conference (Continue the conference when conference leader hangs up) 1 : Group Call-Automatic Conference (End the conference when conference leader hangs up) 2 : Group Call-Broadcasting (End the conference when conference leader hangs up) 3 : Group Call-2 Way Calling ZZ: 00-07: Group No. 00-07
CM85	Specify the maximum number of digits for the area code (Conference Access Code).	• Y=0-7 Area Code Development Pattern No. 0-7 assigned by CM8A Y = A000 (1) X-X...X: Conference Access Code or its part, Max. 8 digits (2) 01-08: 1 digit-8 digits 24◀ : 24 digits
CM35	Specify the trunk seizure timing for the conference trunk.	• YY=36 (1) 00-63: Trunk Route No. assigned by CM30 YY=00 (2) 0: After dialing maximum number of digits

C

C

	DESCRIPTION	DATA
CM36	For an outside participant, allow tandem connection between the conference trunk route and the outgoing trunk route to the participant.	• Y=0 (1) 0000-6363: Conference Trunk Route No. assigned by CM30 YY=00 + Outgoing Trunk Route No. (2) 0: Allow
	For an outside conference leader, allow tandem connection between the incoming trunk route from the conference leader and the conference trunk route.	• Y=0 (1) 0000-6363: Incoming Trunk Route No. + Conference Trunk Route No. assigned by CM30 YY=00 (2) 0: Allow
	Specify the detect timing of participant's no answer. The ringing will stop at this timing.	• Y=3 (1) 16 (2) 00 : No stop ringing 01-14: 1 min.-14 min. (1 min. increments) If no data is set, the default setting is 30sec.
CM35	Assign a trunk name number for the conference trunk route not to display the kind of trunk route assigned by CM35 YY=00 on a D^{term}. "CNF GROUPxx" will be displayed on a D^{term} of participant.	• YY=03 (1) 00-63: Trunk Roue No. (2) 00-14: Trunk Name No. 16-63: Trunk Name No.
CM77	Assign the trunk name to "20" (space).	• Y=2 By Character Code (1) 00-14, 16-63: Trunk Name No. assigned by CM35 YY=03 (2) 20: Space

D

To display “CNF GROUPxx” on a PS:

D	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A to a PS station.	• YY=02 (1) X-XXXXXXXX: PS station No. assigned by CM1C (2) XX ZZ XX: 00-15◀ : Service Restriction Class A
CM15	Allow Calling Name Display-PS in the Service Restriction Class A assigned by CM12 YY=02.	• YYY=123 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 0: Allow
	Allow Calling Name Display for trunk incoming calls in the Service Restriction Class A assigned by CM12 YY=02.	• YYY=136 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Calling Name Display

END

Meet-Me Conference

To attend a conference by accessing from any station or trunk to the conference trunk, do the following programming in addition to the Conference Trunk Assignment on Page 160.

START	DESCRIPTION	DATA
CM29	Assign a Numbering Plan Group number to each tenant.	(1) 00-63: Trunk Route No. (2) 710-713: Numbering Plan Group 0-3
CM20	Assign the access code for LCR Group 0-3.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A126: LCR Group 0 A127: LCR Group 1 A128: LCR Group 2 A129: LCR Group 3
CM8A	Assign an Area Code Development Pattern number to each LCR Group.	• YYYY=A000 (1) 0-3: LCR Group 0-3 (2) 4000-4007: Area Code Development Pattern No. 0-7
	Assign a Route Pattern number to each area code (Meet-Me Conference Access Code) for the Area Code Development Pattern number assigned by CM8A YYYY=A000.	• YYYY=4000-4007 Area Code Development Pattern No. 0-7 (1) X...X: Area Code (Meet-Me Conference Access Code), Max. 8 digits (2) 0000-0255: Route Pattern No. 000-255
	Specify the order of LCR selection for the Route Pattern number assigned by CM8A YYYY=4000-4007.	• YYYY=0000-0255 Route Pattern No. 000-255 (1) 1-4: Order of LCR Selection 1: 1st 2: 2nd 3: 3rd 4: 4th (2) XXX ZZ XXX: 000-255: LCR Pattern No. 000-255 ZZ : 00-63: Trunk Route No. 00-63 assigned by CM30 YY=00
A		

A	DESCRIPTION	DATA
CM8A	Delete all digits of the area code (Meet-Me Conference Access Code) assigned by CM8A YYYY=4000-4007.	• YYYY=5000-5255 LCR Pattern No. 000-255 (1) 152: All digits of Meet-Me Conference Access Code to be deleted (2) 0: To delete
	To add the Meet-Me Conference number, designate "999" as the digits to be added.	• YYYY=5000-5255 LCR Pattern No. 000-255 (1) 100: Designation of Digit Addition Pattern No. (2) 9000-9255: Digit Addition Pattern No. 000-255
		• YYYY=9000-9255 Digit Addition Pattern No. 000-255 (1) 0 (2) Digits to be added 999: Meet-Me Conference
CM85	Specify the maximum number of digits for the area code (Meet-Me Conference Access Code).	• Y=0-7 Area Code Development Pattern No. 0-7 assigned by CM8A YYYY=A000 (1) X-X...X: Meet-Me Conference Access Code or its part, Max. 8 digits (2) 01-08: 1 digit-8 digits 24◀ : 1 digit-24 digits
CM35	Specify the trunk seizure timing for the conference trunk.	• YY=36 (1) 00-63: Trunk Route No. assigned by CM30 YY=00 (2) 0: After dialing maximum number of digits
CM36	For a participant from outside, allow tandem connection between the incoming trunk route from the participant and the conference trunk route.	• Y=0 (1) 0000-6363: Incoming Trunk Route No. + Conference Trunk Route No. assigned by CM30 YY=00 (2) 0: Allow
END		

Hardware Required

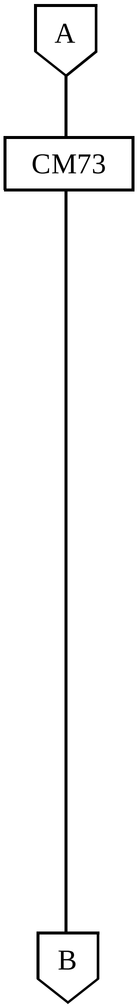
CFTC card

CONSECUTIVE SPEED DIALING

Programming

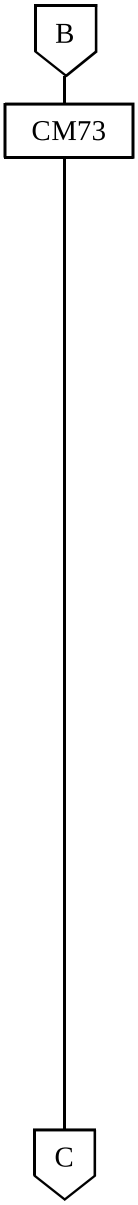
To provide Consecutive Station Speed Dialing from Single Line Telephone or D^{term}:

START	DESCRIPTION	DATA
CM12	Assign Service Restriction Class A to each station.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀ : Service Restriction Class A
CM15	Allow Station Speed Dialing in the Service Restriction Class A assigned by CM12 YY=02.	• YY=07 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign access codes for Station Speed Dialing, Origination, Entry and Cancel, respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (#*, 7*, 7#) (2) A064 : Origination A065 : Entry A066 : Cancel
CM08	Specify whether to provide Toll Restriction for an outgoing call by Station Speed Dialing.	(1) 035 (2) 0 : Not provided 1◀ : Provided
	Specify whether to set "#" dialing as paused data (1.5 sec.) or dialed digit when the DTMF station or D^{term} dials "#" in the setting of the Station Speed Dialing feature.	(1) 168 (2) 0 : Paused data (1.5 sec.) 1◀ : Dialed digit
	Specify "*" dialing is set as programmable pause by CM41 Y=0>38 or dialed digit when the DTMF station or D^{term} dials "*" in the setting of the Station Speed Dialing feature.	(1) 171 (2) 0 : Programmable pause by CM41 Y=0>38 1◀ : Dialed digit
A		



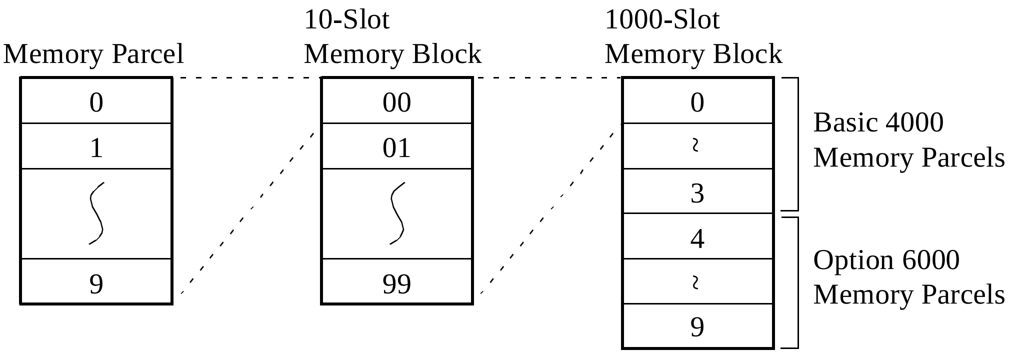
DESCRIPTION	DATA
Allocate the memory area for Station Speed Dialing to each station when using Consecutive Speed Dialing.	(1) X-XXXXXXXX: Station No. (2) W XX Y ZZ W : 0-3 (Basic), 4-9 (Option): 1000-Slot Memory Block No. **Note** XX: 00-99: Memory Start Block No. (10-Slot Memory Block) Y : Facility for programming the dialed number from the Station 0/1: Effective/Ineffective ZZ : 01-10: Number of 10-Slot Memory Blocks

Note: *1000-Slot Memory Block number 4-9 (6000 Memory Parcels) can be used when the Expansion Memory card (PZ-M537) is mounted on the MP card.*
For using this memory area, there are several conditions as mentioned below:
• This memory area cannot be used for Speed Dialing with Speed Dialing keys provided by CM90: F11XX on a D^{term}, and cannot also be used for System Speed Dialing.
• When exchanging the Expansion Memory card for another, data setting for this memory area must be reentered.
• The Office Data in this memory area can be saved and loaded by MAT operations.



DESCRIPTION	**DATA**

The memory area for storing one called number of Station Speed Dialing is called a "Memory Parcel". An assembly of 10 Memory Parcels is called a "10-Slot Memory Block," and one hundred 10-Slot Memory Blocks are called a "1000-Slot Memory Block".



Example: *If the stored number intended is 10 for Station Number 300, 20 for Station Number 301, and 30 for Station Number 302, the memory areas assignment is as follows.*

Station No. *(1st Data)*	*1000-Slot Memory Block No.* *(2nd Data: W)*	*Memory Start Block No. (10-Slot Memory Block)* *(2nd Data: XX)*	*Number of 10-Slot Memory Block* *(2nd Data: ZZ)*
300	*0*	*00*	*01*
301	*0*	*01*	*02*
302	*0*	*03*	*03*
303	*0*	*06*	*01*

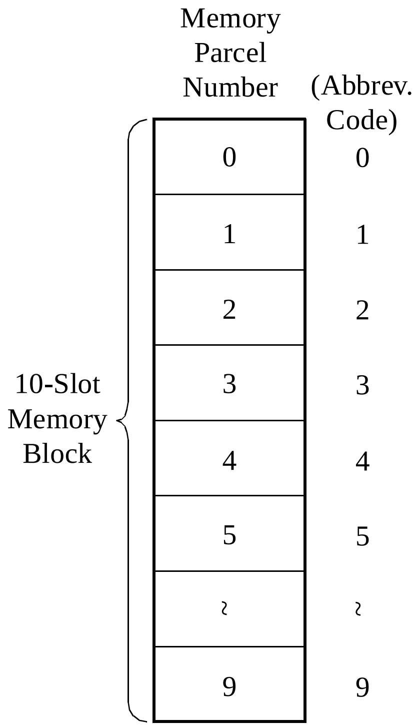
C

DESCRIPTION	DATA

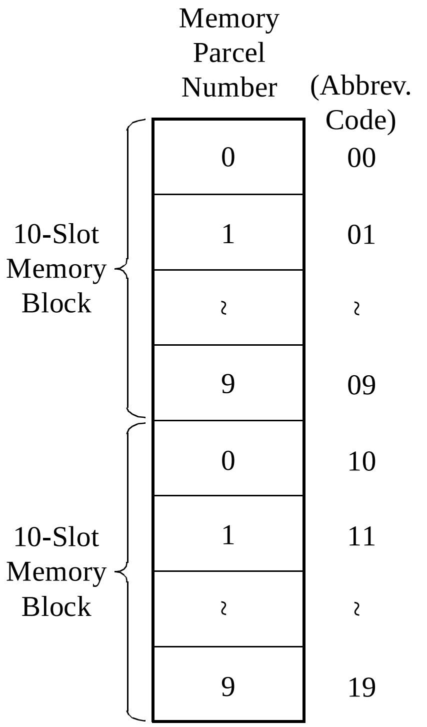
CM73

The abbreviated codes for this feature are automatically determined by assigning this command, on a station basis.
If the number of Memory Parcels per station does not exceed 10, then Abbreviated Code =0-9.
If the number of Memory Parcels per station exceeds 11, then Abbreviated Code =00-99.
The following figure shows the relation between Abbreviated Codes and Memory Parcels.

In the case of 10 Memory Parcels



In the case of 20 Memory Parcels

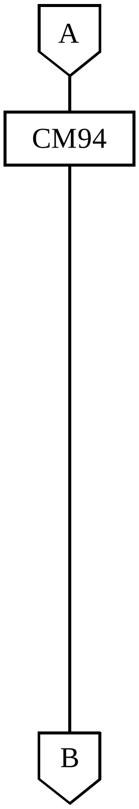


D

	DESCRIPTION	DATA
D		
CM74	Assign the number to be dialed to each Memory Slot number, if required. The numbers to be called are usually set from individual stations by their station users.	• Y=0 (1) X YY Z X : 0-3 (Basic), 4-9 (Option): 1000-Slot Memory Block No. YY : 00-99: 10-Slot Memory Block No. Z : 0-9: Memory Parcel No. (2) Stored No.: Outgoing Call Access Code (Max. 4 digits) + $\boxed{,}$ + Stored No. (Max. 26 digits) To set a pause into the Stored No., enter “C” (Fixed Pause=1.5 sec.) or “D” (Programmable Pause specified by CM41 Y=0>38) after desired digits.
	Assign the Station Name to be displayed to each Memory Slot number, by character codes or character.	• Y=1 (1) X YY Z X : 0-3 (Basic), 4-9 (Option): 1000-Slot Memory Block No. YY : 00-99 : 10-Slot Memory Block No. Z : 0-9 : Memory Parcel No. (2) XX...XX : Station Name Character Code (Max. 32 digits, 16 characters) See APPENDIX B: CHARACTER CODE TABLE.
		• Y=2 (1) X YY Z X : 0-3 (Basic), 4-9 (Option): 1000-Slot Memory Block No. YY : 00-99: 10-Slot Memory Block No. Z : 0-9: Memory Parcel No. (2) XX...XX : Station Name Character (Max. 16 characters)
CM90	Assign Station Speed Dialing keys on each D$^{\text{term}}$, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F11XX XX: 00-99: Station Speed Dialing 00-99 **Note:** *The initial setting of key layout is for 16 Line/Trunk/Feature keys (Key No 01-16).* *When using Key No. 17-24, data setting of CM12 YY=24, 2nd data=0 is required.*
END		

To provide Consecutive Station Speed Dialing from D^{term} with One Touch keys:

START	DESCRIPTION	DATA
CM12	Assign Service Restriction Class A to each station.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Station Speed Dialing in the Service Restriction Class A assigned by CM12 YY=02.	• YY=07 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM08	Specify whether to provide Toll Restriction for an outgoing call by Station Speed Dialing.	(1) 035 (2) 0 : Not provided 1◀ : Provided
	Specify whether to set “#” dialing as paused data (1.5 sec.) or dialed digit when the D^{term} dials “#” in the setting of the Station Speed Dialing feature.	(1) 168 (2) 0 : Paused data (1.5 sec.) 1◀ : Dialed digit
	Specify whether to set “*” dialing as programmable pause by CM41 Y=0>38 or dialed digit when the DTMF station or D^{term} dials “*” in the setting of the Station Speed Dialing feature.	(1) 171 (2) 0 : Programmable pause by CM41 Y=0>38 1◀ : Dialed digit
A		



DESCRIPTION	DATA
Allocate the memory area for Station Speed Dialing to each station when using Consecutive Speed Dialing for One Touch Keys.	(1) X-XXXXXXXX: My Line No. (2) W XX 0 ZZ W : 0-3 (Basic), 4-9 (Option): 1000-Slot Memory Block No. XX : 00-99: 10-Slot Memory Start Block No. ZZ : 01-10: Number of 10-Slot Memory Blocks

Note 1: *1000-Slot Memory Block number 4-9 (6000 Memory Parcels) can be used when the Expansion Memory card (PZ-M537) is mounted on the MP card.*
If the station number is assigned to One Touch keys using this memory area, the lamp does not show the busy state.

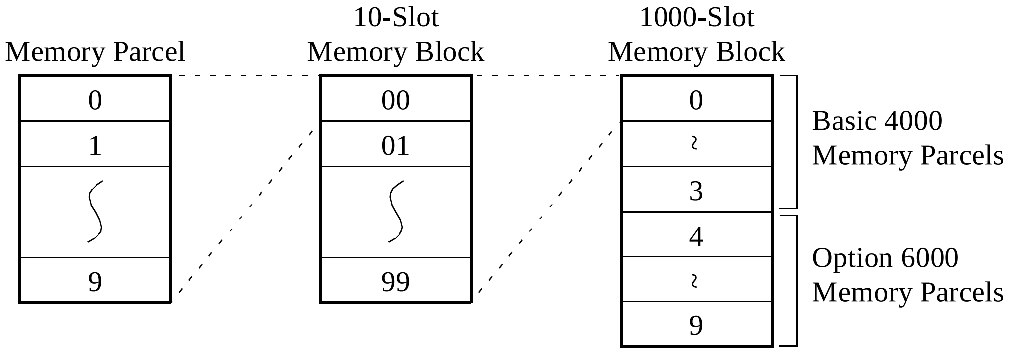
Note 2: *When Consecutive Speed Dialing is provided using the One Touch Keys, the same memory area must be assigned on CM73 and CM94.*

B

DESCRIPTION **DATA**

CM94

The memory area for storing one called number of Station Speed Dialing is called a "Memory Parcel". An assembly of 10 Memory Parcels is called a "10-Slot Memory Block," and one hundred 10-Slot Memory Blocks are called a "1000-Slot Memory Block".



Example: *If the stored number intended is 10 for Station Number 300, 20 for Station Number 301, and 30 for Station Number 302, the memory areas assignment is as follows.*

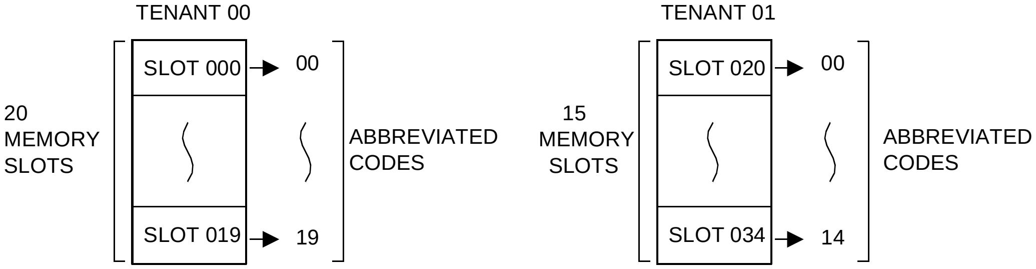
Station No.	*1000-Slot Memory Block No.*	*Memory Start Block No. (10-Slot Memory Block)*	*Number of 10-Slot Memory Block*
(1st Data)	*(2nd Data: W)*	*(2nd Data: XX)*	*(2nd Data: ZZ)*
300	*0*	*00*	*01*
301	*0*	*01*	*02*
302	*0*	*03*	*03*
303	*0*	*06*	*01*

END

To provide Consecutive System Speed Dialing:

START	DESCRIPTION	DATA
CM12	Assign Service Restriction Class A to each station.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow System Speed Dialing in the Service Restriction Class A assigned by CM12 YY=02.	• YY=06 System Speed Dialing (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for System Speed Dialing.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (##) (2) A067: System Speed Dialing
CM71	Assign the memory area for the System Speed Dialing. 300 memory slots are available per system. The number of slots available for each Tenant is also 300.	(1) 00-63 : For stations within Tenant 00-63 64 : For Attendant Console (2) XXX YYY XXX : 000-299: First Memory Slot No. in Block YYY : 001-300: Number of Slots to be allocated in Block
	Abbreviated Call Codes required for accessing this feature are automatically given to each Tenant as shown below.	For example, to provide 20 memory slots starting at Slot 60: Data =060020

Example:



The number of digits for Abbreviated Codes are automatically determined as shown below:

- Less than 100 memory slots per Tenant: 2 digits (00-99)
- More than 100 memory slots per Tenant: 3 digits (000-299)

A

	DESCRIPTION	**DATA**
A		
CM72	Set a stored number to each Memory Slot number allocated by CM71, as needed.	• Y=0 (1) 000-299: Memory Slot No. (2) Stored No.: Outgoing Access Code (Max. 4 digits) + $\boxed{,}$ + Stored No. (Max. 26 digits) To set a pause into the Stored No., enter “C” (Fixed pause =1.5 sec.) or “D” (Programmable pause specified by CM41 Y=0>38) after desired digits.
	Assign the name for display, to the Memory Slot number allocated by CM71, by character codes or character.	• Y=1 (1) 000-299 : Memory Slot No. (2) XX...XX : Station Name Character Code (Max. 32 digits, 16 characters) See APPENDIX B: CHARACTER CODE TABLE.
		• Y=2 (1) 000-299 : Memory Slot No. (2) XX...XX : Station Name Character (Max. 16 characters)
CM08	Specify the System Speed Dialing security. (Stored number displays on $\mathrm{D}^{\mathrm{term}}$ for an outgoing call by System Speed Dialing.)	(1) 043 (2) 0 : Not displayed 1◀ : Display
	Specify Toll Restriction for an outgoing call by System Speed Dialing.	(1) 044 (2) 0 : Not provided 1◀ : Provided
END		

CONSULTATION HOLD

Programming

START	DESCRIPTION	DATA
CM08	Select the ringing pattern on station calls with a trunk line placed in Consultation Hold.	(1) 137 (2) 0 : Change from Internal Ringing (CM08>138) to External Ringing (CM35 YY=33) when transferring a call 1◀ : External Ringing (CM35 YY=33)
CM12	Assign the Service Restriction Class C to each station.	• YY=07 (1) X-XXXXXXXX: Station No. (2) 00-15◀: Service Restriction Class C
CM15	Allow the Switch Hook Flash capability in the Service Restriction Class C assigned by CM12 YY=07.	• YY=88, 89 Switch Hook Flash on Internal Call • YY=90, 91 Switch Hook Flash on External Call (1) 00-15 : Service Restriction Class C assigned by CM12 YY=07 (2) 1◀ : Available (Special Dial Tone Connection)
END		

CUSTOMER ADMINISTRATION TERMINAL (CAT)

Programming

START

	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class B for CAT to the required D^{term}.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ ZZ: 00-15◀ : Service Restriction Class B
CM15	Allow change of mode for CAT in the Service Restriction Class B assigned by CM12 YY=02.	• YY=56 (1) 00-15 : Service Restriction Class B assigned by CM12 YY=02 (2) 1◀ : Allow
CME7	Specify the command codes accessible to each Password Level.	• YY=00: Password Level 0-6 • YY=01: Password Level 1-6 • YY=02: Password Level 2-6 • YY=03: Password Level 3-6 • YY=04: Password Level 4-6 • YY=05: Password Level 5-6 • YY=06: Password Level 6 • YY=10: Password Level 0 • YY=11: Password Level 1 • YY=12: Password Level 2 • YY=13: Password Level 3 • YY=14: Password Level 4 • YY=15: Password Level 5 • YY=16: Password Level 6 (1) 02-F8 : Command Code exclusive of 03, E7, E9 (2) 0 : Allow 1◀ : Restricted

A

	DESCRIPTION	DATA
A		
CME9	Assign a password to each Password Level.	(1) 0-7: Password Level 0-7 (2) X-X...X (Max. 8 digits Password Code) A password code for Password Level 7 must be assigned prior to providing the password service by Function No. 9 of CME9 The following passwords are not available: "CCCCCCCC" "FFFFFFFF"
	Provide the system with Password Feature. After setting this data, access to system programming will be available with password entry only.	(1) 9 (2) 0: Provided
END		

Note 1: *If the system data all clear is required before programming from a CAT, perform the following operations:*

1. *Plug the DLC card into LT00 Slot of PIM 0*
2. *Connect the CAT to LEN000 at the MDF*
3. *Set SW3 on the MP card to "B"*
4. *Press SW1 (RESET Switch) on the MP card (System Data All Clear)*
5. *Set SW3 to "0" and press SW1.*
6. *Set the* D^{term} *to CAT mode (Station number 300 is automatically assigned to the* D^{term}*).*

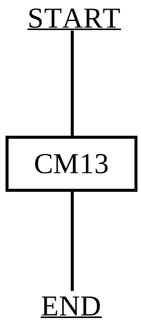
Note 2: *If Password Service is activated, enter the predetermined password by CM03 before programming from a CAT.*

$\boxed{\text{ST}}$ + 03 + $\boxed{\text{DE}}$ + Password Level number (0-7)+ $\boxed{\text{DE}}$ +Password+ $\boxed{\text{EXE}}$

- *"OK" will be displayed, if accepted.*
- *"DATA ERROR" will be displayed if the password is incorrect.*

DATA LINE SECURITY

Programming



DESCRIPTION	DATA
Assign the function of Analog Data station (Single-Line Station with FAX or MODEM) to the required stations.	• YY=07 (1) X-XXXXXXXX: Station No. (2) 0: Data station

DELAYED RINGING

Programming

START

	DESCRIPTION	DATA
CM90	Assign the Delayed Ringing feature to each line key on a D^{term}. **Note:** *The Delayed Ringing feature can be assigned to the first 16 line/trunk keys (Key 01-16)/24 line/trunk keys (Key 01-24).*	• YY=03 (1) My Line No. + $\boxed{,}$ + Key No. **Note** (2) 0: Delayed Ringing
CM41	Specify the timing for Delayed Ringing.	• Y=1 (1) 09 (2) 01-10: 2-20 sec. in 2 sec. increments If no data is set, the default setting is 10 seconds.

END

DIAGNOSTICS

Programming

Refer to the Maintenance Manual.

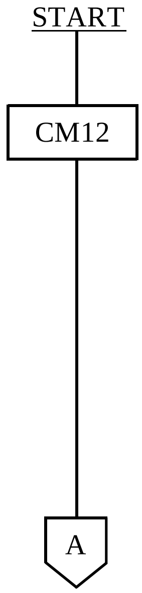
DIAL BY NAME

Programming

1. Assignment for the language indicated on the LCD and the type of D^{term}

START	DESCRIPTION	DATA
CM04	Select language to display on LCD. **(Series 2100 software required)** **INITIAL**	• YY=00 (1) 00 (2) 1 : English 2 : French 3 : Spanish 4 : Portuguese 7 ◄: English
CM12	Specify the type of D^{term} accommodated in each DLC card. **INITIAL** **Note 1:** *For PN-2DLC/4DLC cards, this data must be assigned to the first LEN (Level 0) of each card.* *For 8DLC cards, this data must be assigned to the first LEN (Level 0) and fifth LEN (Level 4) of each card.* **Note 2:** *The same type of D^{term}s must be accommodated in the same DLC card.*	• YY=17 (1) X-XXXXXXXX: My Line No. (2) 0 : D^{term} Series III (Soft Key is not available) 1 : D^{term} Elite Terminal (Soft Key is available) 3 ◄: D^{term} Series E (Soft Key is available)
END		

2. Assignment for Soft Key



DESCRIPTION	DATA
Specify that Soft Key feature is available to each D^{term}.	• YY=22 (1) X-XXXXXXXX: My Line No. (2) 0 ◀ : Available
Assign Soft Key Pattern number to each D^{term}.	• YY=23 (1) X-XXXXXXXX: My Line No. (2) 0 : Pattern No. 0 1 : Pattern No. 1 2 : Pattern No. 2 3 ◀ : Pattern No. 3

A

DESCRIPTION | **DATA**

CM9A

Assign the Dial By Name function to each Soft Key on idle status of the D^{term}.

The LCD shows a maximum of 4 Soft Keys at once. If assigning more than 4 Soft Keys on one status, it is necessary to assign Scroll key at every 4 keys (on first through fourth display).

Note 1: *Scroll key must be assigned as a key for each active display.*
Note 2: *Help key is only available in Pattern No. 3.*
Note 3: *For the Pattern No. 3, the initial Soft Key data for Dial By Name are assigned as follows:*

CM9A YY=03	
1ST DATA	**2ND DATA**
0001	F5014
0002	F5015

Note 4: *Pattern No. 3 is fixed.*
Note 5: *Dial By Name is available only when the D^{term} is in idle state.*

- YY=00-03 Soft Key Pattern No. 0-3 assigned by CM12 YY=23

(1) 00 bb
00 : Status No. (Idle state) **Note 5**
bb : 00-15: Soft Key No.
00-03: Indicated on 1st display
04-07: Indicated on 2nd display
08-11: Indicated on 3rd display
12-15: Indicated on 4th display

(2) F5002: Scroll key to change Soft Key Indication
F5014 : Dial By Name for System Speed Dialing (300-Slot Memory)
F5015 : Dial By Name for Station Speed Dialing
F5016 : Dial By Name for System Speed Dialing (1000-Slot Memory Block No. 0)
F5017 : Dial By Name for System Speed Dialing (1000-Slot Memory Block No. 0)
F5018 : Dial By Name for System Speed Dialing (1000-Slot Memory Block No. 2)
F5019 : Dial By Name for System Speed Dialing (1000-Slot Memory Block No. 3)

Assign the Characters indicated on each status of the D^{term}, corresponding to the Soft Key function assigned by CM9A YY=00-03. For the Pattern No. 3, the initial Soft Key data for Dial By Name are assigned as follows:

CM9A YY=13	
1ST DATA	**2ND DATA**
0001	SYS.
0002	STA.

- YY=10-13 Soft Key Pattern No. 0-3 assigned by CM12 YY=23

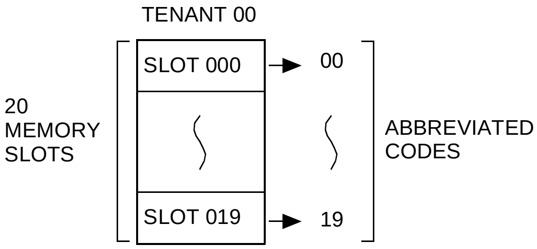
(1) Same as CM9A YY=00-03
(2) Soft Key name indicated on LCD (Max. 12 characters)
See APPENDIX B: CHARACTER CODE TABLE.

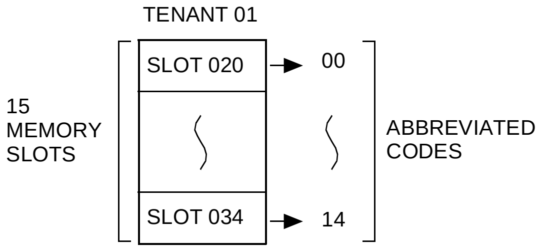
END

3. Assignment for the Memory Allocation and the Station Name
    - When using Dial By Name for System Speed Dialing:

START

	DESCRIPTION	DATA
CM71	Assign the memory block for System Speed Dialing. 300 memory slots are available per system. The number of slots available for each Tenant is also 300. Abbreviated Call Codes required for accessing this feature are automatically given to each Tenant as shown in the following example.	(1) 00-63: For stations within the Tenant 00-63 (2) XXX YYY XXX: 000-299: Starting Memory Slot No. in Block YYY: 001-300: Number of Slots to be assigned in Block For example, to provide 20 memory slots starting at Slot 60: Data: 060020

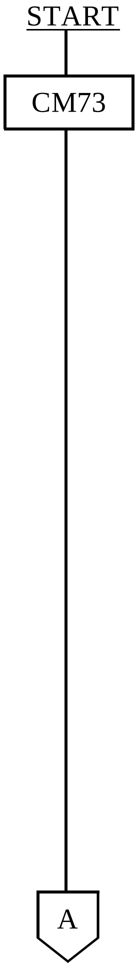




	DESCRIPTION	DATA
CM72	Assign the number to be called to the Memory Slot number allocated by CM71.	• Y=0 (1) 000-299: Memory Slot No. (2) Stored No.: Outgoing Access Code (Max. 4 digits) + $\boxed{,}$ + Called Party No. (Max. 26 digits) To set a pause into the Stored No., enter “C” (Fixed pause =1.5 sec.) or “D” (Programmable pause specified by CM41 Y=0>38) after desired digits (more than 2 digits).
	Assign the name for display, to the Memory Slot number allocated by CM71, by character codes or character.	• Y=1 (1) 000-299: Memory Slot No. (2) XX...XX: Station Name Character Code (Max. 32 digits, 16 characters) *See APPENDIX B: CHARACTER CODE TABLE*. • Y=2 (1) 000-299: Memory Slot No. (2) XX...XX: Station Name Character by MAT/CAT (Max. 16 characters)

END

- When using Dial By Name for Station Speed Dialing, D^{term} One Touch Keys, and System Speed Dialing (1000-Slot Memory):



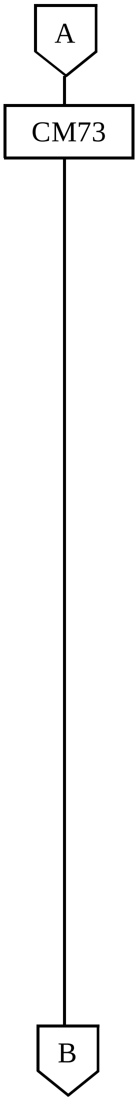
DESCRIPTION	DATA
Allocate the memory area for Station Speed Dialing to each station when using Dial By Name for Station Speed Dialing.	(1) X-XXXXXXXX: Station No. (2) W XX Y ZZ (3) W : 0-3 (Basic), 4-9 (Option): 1000-Slot Memory Block No. **Note** XX: 00-99: Memory Start Block No. (10-Slot Memory Block) Y : Facility for programming the dialed number from the Station 0/1: Effective/Ineffective ZZ : 01-10: Number of 10-Slot Memory Blocks

Note: *1000-Slot Memory Block number 4-9 (6000 Memory Parcels) can be used when the Expansion Memory card (PZ-M537) is mounted on the MP card.*
For using this memory area, there are several conditions as mentioned below:

This memory area cannot be used for Speed Dialing with Speed Dialing keys provided by CM90: F11XX on a D^{term}, and cannot also be used for System Speed Dialing.

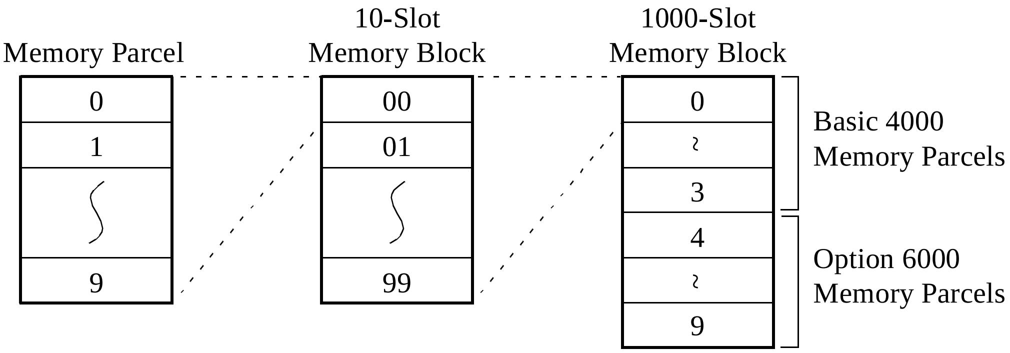
When exchanging an Expansion Memory card for another, data setting for this memory area must be reentered.

The Office Data in this memory area cannot be saved and loaded by MAT operations.



DESCRIPTION | **DATA**

The memory area for storing one called number of Station Speed Dialing is called a “Memory Parcel”. An assembly of 10 Memory Parcels is called a “10-Slot Memory Block,” and one hundred 10-Slot Memory Blocks are called a “1000-Slot Memory Block”.



Example: *If the stored number intended is 10 for Station Number 300, 20 for Station Number 301, and 30 for Station Number 302, the memory areas assignment is as follows.*

Station No. *(1st Data)*	*1000-Slot Memory Block No.* *(2nd Data: W)*	*Memory Start Block No. (10-Slot Memory Block)* *(2nd Data: XX)*	*Number of 10-Slot Memory Block* *(2nd Data: ZZ)*
300	*0*	*00*	*01*
301	*0*	*01*	*02*
302	*0*	*03*	*03*
303	*0*	*06*	*01*

B

	DESCRIPTION	DATA
CM94	Allocate the memory area for Station Speed Dialing to each station when using Dial By Name for D^{term} One Touch Keys. The same memory area must be assigned on CM73 and CM94.	(1) X-XXXXXXXX: My Line No. (2) W XX 0 ZZ W : 0-3 (Basic), 4-9 (Option): 1000-Slot Memory Block No. XX : 00-99: 10 Slot Memory Start Block No. ZZ : 01-99: Number of 10-Slot Memory Blocks

Note 1: *When Dial By Name is provided using the One Touch Keys, the same memory area must be specified by CM73 and CM94.*

Note 2: *1000-Slot Memory Block number 4-9 can be used when the Expansion Memory card (PZ-M537) is mounted on the MP card.*
If the station number is assigned to One Touch keys using this memory area, the lamp does not show the busy state.

	DESCRIPTION	DATA
CM08	Specify the memory area to be used for System Speed Dialing when using Dial By Name for System Speed Dialing (1000-Slot Memory).	(1) 112: 1000-Slot Memory Block No. 0 (2) 0 : Available 1◀ : Not available (1) 111: 1000-Slot Memory Block No. 1 (2) 0 : Available 1◀ : Not available (1) 176: 1000-Slot Memory Block No. 2 (2) 0 : Available 1◀ : Not available (1) 110: 1000-Slot Memory Block No. 3 (2) 0 : Available 1◀ : Not available

C

	DESCRIPTION	DATA
C CM74	Assign the number to be dialed to each Memory Slot number, if required. The numbers to be called are usually set from individual stations by their station users.	• Y=0 (1) X YY Z X : 0-3 (Basic), 4-9 (Option): 1000-Slot Memory Block No. YY: 00-99: 10-Slot Memory Block No. Z : 0-9: Memory Parcel No. (2) Stored No.: Outgoing Call Access Code (Max. 4 digits) + $\boxed{,}$ + Called Party No. (Max. 32 digits) To set a pause into the Stored No., enter “C” (Fixed Pause=1.5 sec.) or “D” (Programmable Pause specified by CM41 Y=0>38) after desired digits.
	Assign the Station Name to be displayed to each Memory Slot number, by character codes or character.	• Y=1 (1) X YY Z X : 0-3 (Basic), 4-9 (Option): 1000-Slot Memory Block No. YY : 00-99: 10-Slot Memory Block No. Z : 0-9: Memory Parcel No. (2) XX...XX: Station Name Character Code (Max. 32 digits, 16 characters) See APPENDIX B: CHARACTER CODE TABLE.
END		• Y=2 (1) X YY Z X : 0-3 (Basic), 4-9 (Option): 1000-Slot Memory Block No. YY : 00-99: 10-Slot Memory Block No. Z : 0-9: Memory Parcel No. (2) XX...XX: Station Name Character by MAT/CAT (Max. 16 characters)

Hardware Required

D^{term} with LCD and Soft Key, and DLC card

DIAL CONVERSION

Programming

START	DESCRIPTION	DATA
CM10	Assign the card number of the DTMF Receiver to the required LEN. **Note:** *E200 is dedicated to built-in DTMF Receiver of the MP card.*	(1) 000-763: LEN (2) Card No. of DTMF Receiver (8RST) E201-E203: For PIM 0/1 E204-E207: For PIM 2/3 E208-E211: For PIM 4/5 E212-E215: For PIM 6/7
CM12	Assign the type of telephone set to DTMF stations. This data assignment is not required for D^{term} stations.	• YY=00 (1) X-XXXXXXXX: Station No. (2) 2: DTMF Telephone set
CM45	Assign DTMF Receivers for use with DTMF stations.	• Y=0 Make Busy (1) XX Z XX : DTMF Receiver Card No. 00 : MP Built-in DTMF Receiver 01-15 : PN-8RST Z : 0-3: Circuit No. (2) 1◀ : In service • Y=1 PBR for incoming call from Tie Line/DID (1) XX Z : Same as CM45 Y=0 (2) 1◀ : For both DTMF station and Tie Line/DID
A		

	DESCRIPTION	DATA
A		
CM35	For a DP trunk, assign the type of signaling for Outgoing and Bothway trunk routes to DP.	• YY=01 (1) 00-63: Trunk Route No. (2) <Incoming> <Outgoing> 2: DP DP
	Specify the DP Sender characteristics to match the Central Office.	• YY=23 DP Sender Inter Digital Pause (1) 00-63: Trunk Route No. (2) 0 : 300 ms. 1 : 400 ms. 2 : 500 ms. 3 : 600 ms. 4 : 700 ms. 5 : 900 ms. 6 : 1100 ms. 7◀ : 800 ms.
		• YY=25 DP Sender Make Ratio (1) 00-63: Trunk Route No. (2) 0 : 39% 1◀ : 33%
		• YY=45 DP Sender Release Timing (1) 00-63: Trunk Route No. (2) 0 : 2 seconds 1 : 4 seconds 2 : 6 seconds 3 : 8 seconds 4 : 12 seconds 5 : 14 seconds 6 : 16 seconds 7◀ : 10 seconds
	For a DTMF trunk, assign the type of signaling for Outgoing and Bothway trunk routes to DTMF.	• YY=01 (1) 00-63: Trunk Route No. (2) <Incoming> <Outgoing> 7◀ : DTMF/DP DTMF
B		

	DESCRIPTION	DATA
B	Specify the DTMF Sender characteristics to match the Central Office.	• YY=24 DTMF Inter Digital Pause (1) 00-63 : Trunk Route No. (2) 0 : 32 ms. 1 : 64 ms. 2 : 80 ms. 3 : 96 ms. 4 : 160 ms. 5 : 192 ms. 6 : 240 ms. 7◀ : 128 ms. • YY=26 DTMF Sender Signal Width (1) 00-63 : Trunk Route No. (2) 0 : 64 ms. 1◀ : 128 ms. • YY=46 DTMF Sender Release Timing (1) 00-63 : Trunk Route No. (2) 0 : 2 seconds 1 : 4 seconds 2 : 6 seconds 3 : 8 seconds 4 : 12 seconds 5 : 14 seconds 6 : 16 seconds 7◀ : 10 seconds
CM08	Assign whether “*” or “#” from a DTMF Telephone is used as a Switch Hook Flash while hearing Busy Tone.	(1) 050 : * is used as Switch Hook Flash (2) 0 : Effective (1) 051 : # is used as Switch Hook Flash (2) 0 : Effective
END		

Hardware Required

DTMF Receiver (8RST card) × n

n: Depends on the number of DTMF stations and the traffic condition of the system.

DIRECT DIGITAL INTERFACE (DDI)

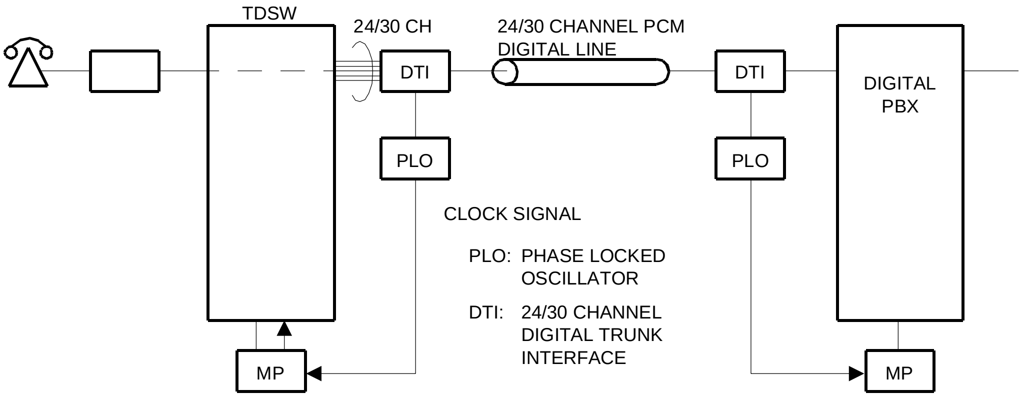
System Outline

The PBX is equipped with Direct Digital Interface which can be interfaced with a Tie Line or Public Network of

- 24-Channel PCM Digital Line (1.544 MHz)
- 30-Channel PCM Digital Line (2.048 MHz)

To add a Direct Digital Interface to the system, it is necessary to install a Digital Trunk Interface (DTI) card. The figure below shows the system outline of the Direct Digital Interface of the PBX.

System Outline of Direct Digital Interface



DTI

The Digital Trunk Interface (DTI) interfaces the PBX directly to a 24/30-Channel PCM transmission line. The DTI has the following functions.

For 24-DTI:

- Unipolar/Bipolar Conversion (AMI Format)
- Signalling Insertion/Extraction
- Alarm Detection/Insertion
- Digital PAD on Voice Signal Transmission
- Loop-Back Test (Local/Remote Loop Back)
- Cyclic Redundancy Checking (based on ITU-T Rec. G704)

For 30-DTI:

- Unipolar/Bipolar Conversion (HDB3 Format)
- Signalling Insertion/Extraction
- Alarm Detection/Insertion
- Digital PAD on Voice Signal Transmission
- Loop-Back Test (Local/Remote Loop Back)
- Cyclic Redundancy Checking (based on ITU-T Rec. G704)
- Channel Associated Signalling (based on ITU-T Rec. 0421 Digital R2 Signalling Code)

For connection of a 24-DTI and transmission line, twisted-pair cables can be used. For connection of a 30-DTI and transmission line, either coaxial cable or twisted pair cable can be used.

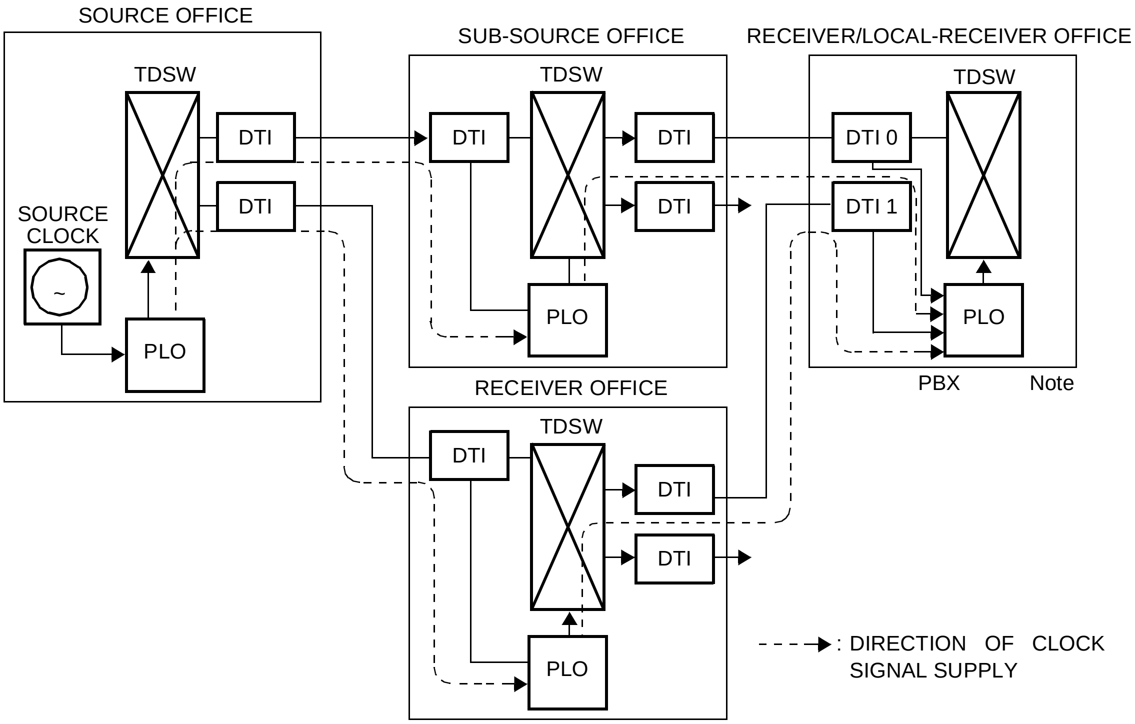
PLO

The Phase Locked Oscillator (PLO) equipped on the MP card is responsible to synchronize the system to the digital network clock.

When the PBX is a clock receiver office, the PLO generates the clock signals according to the source clock received from the source office within the network. The source clock signals are extracted at DTI cards and supplied to the PLO. Two clock routes are available; one is the Route 0 from the source office, and the other is a standby Route 1 from a sub-source office. When no clock signals arrive from either Route 0 or Route 1 due to a transmission line failure, the PLO keeps generating the clock signals at the frequency of the previous source clock. The PLO can receive different frequency of source clocks from Route 0 and Route 1.

The figure below shows an example of clock supply route when the system is a receiver office.

Clock Supply Route



Note: *DTI 0 and DTI 1 must be mounted in PIM 0.*

System Capacity

System Capacity for Direct Digital Interface

DESCRIPTION	CAPACITY	
	24-DTI	30-DTI
DTI Card	8	4
DTI Trunk	192	120
DTI Trunk Route	64	64
Ports per DTI Card	24	32

Hardware Required

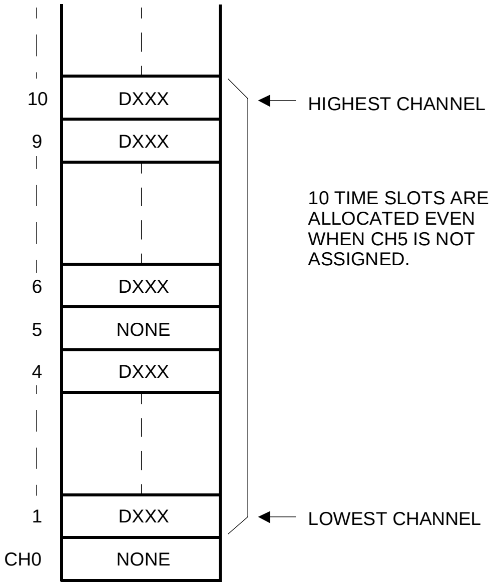
DTI card
MP (Internal PLO) card

Time Slot Allocation

On each DTI card, the system recognizes the lowest and highest Channel Numbers to which trunk numbers have been assigned, and allocates Time Slots to all the channels between them. If trunk numbers are not assigned to consecutive channels, the system allocates Time Slots to channels not assigned.

For example, as shown below, even when Channel 1 through Channel 10 have been assigned by the system data programming (CM07 YY=01) except for Channel 5, the system allocates a total of 10 Time Slots for all ten channels. Therefore, to avoid unnecessary allocation of Time Slots, it is recommended that consecutive channels be assigned on each DTI card.

Time Slot Allocation for DTI



DTI Specifications

Transmission Characteristics

CHARACTERISTICS	24-CHANNEL	30-CHANNEL
(1) Output		
• Line Rate	1.544 Mbps ±50 ppm	2.048 Mbps ±50 ppm
• Line Code	AMI with ZCS/B8ZS*	HDB3 (High Density Bipolar 3)
• Line Impedance	100 ohms	75 ohms (Coaxial Cable) 120 ohms (Twisted-Pair Cable)
• Pulse Amplitude (Base to Peak)	3 volts ±0.6 volts	2.37 volts nominal (Coaxial Cable) 3 volts nominal (Twisted-Pair Cable)
• Pulse Width	324 ns ±30 ns	244 ns nominal
(2) Input		
• Line Rate	1.544 Mbps ±200 bps (130 ppm)	2.048 Mbps ±50 ppm
• Pulse Amplitude (Base to Peak)	1.5 volts-3 volts	1.5 volts-2.7 volts (Coaxial Cable) 1.5 volts-3.3 volts (Twisted-Pair Cable)
• Frame Synchronization Pattern	100011011100	
• Input Jitter	ITU-T Fig. 1/G743	ITU-T Fig. 1/G743
• Wander	+138UI, –193UI or –138UI, +193UI	ITU-T G823
• Cable Length from PBX to CSU	Maximum 200 m (655 ft.) [with 0.6 ϕ (22 ABAM) twisted-pair cable]	Maximum 400 m (1310 ft.) (with 0.6 ϕ twisted-pair cable)

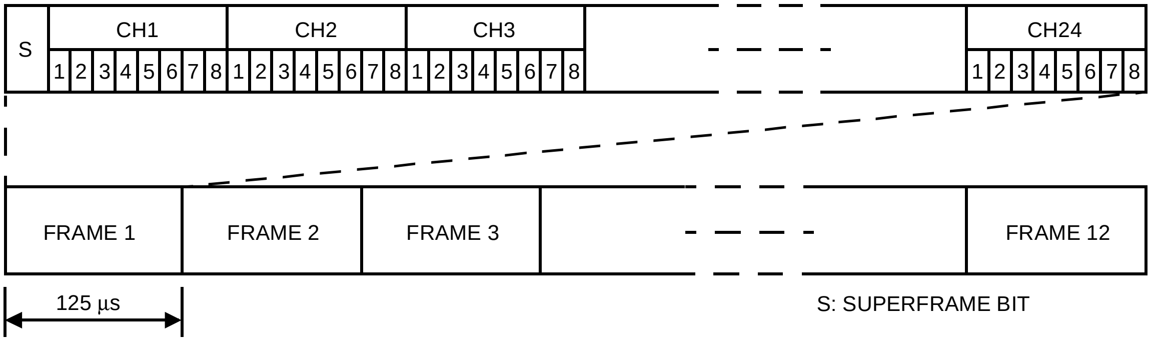
* AMI : Alternate Mark Inversion
ZCS : Zero Code Suppression
B8ZS : Bipolar Eight Zero Substitution

Frame Configuration of 24-DTI

According to the AT&T Specifications for 24-Channel transmission, there are two types of frame configurations:
– 12-Multi Frame (D4)
and
– 24-Multi Frame (ESF)

1. 12-Multi Frame - This configuration has 12-Multi Frames, and each Multi frame has a 24-Channel PCM signal (8 bits/channel) and a S bit (Super Frame Bit). The figure below shows the frame configuration, and the table shows the frame bit assignment.

DTI Frame Configuration (12-Multi Frame)



12-Multi Frame Bit Assignment

FRAME NO.	S BIT		BIT NO. OF EACH CHANNEL (CH1-CH24)		SIGNAL CHANNEL
	TERMINAL SYNCHRONIZATION (FT)	SIGNAL SYNCHRONIZATION (FS)	INFORMATION SIGNAL BIT	CONTROL SIGNAL BIT	
1	1		1-8		
2		0	1-8		
3	0		1-8		
4		0	1-8		
5	1		1-8		
6		1	1-7	8	A
7	0		1-8		
8		1	1-8		
9	1		1-8		
10		1	1-8		
11	0		1-8		
12		0	1-7	8	B

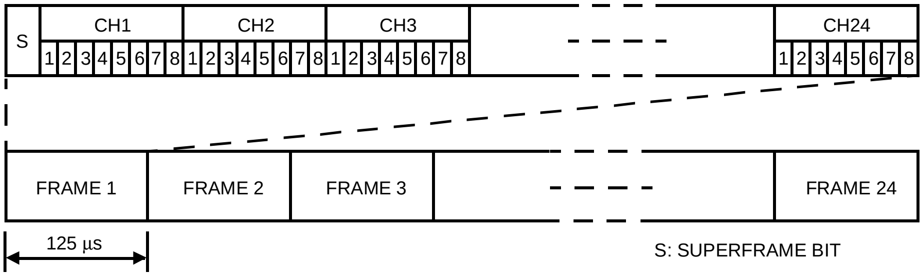
* The S-bit is the first bit in each frame.

* Frames are repeated in the order shown above.

* Frames 6 and 12 become signal frames.

2. 24-Multi Frame - This configuration has 24-Multi Frames and each Multi frame has a 24-Channel PCM signal (8 bits/channel) and a S bit (Super Frame Bit). The figure below shows the frame configuration, and the table shows the frame bit assignment.

DTI Frame Configuration (24-Multi Frame)



24-Multi Frame Bit Assignment

FRAME NO.	S BIT			BIT NO. OF EACH CHANNEL (CH1-CH24)		SIGNAL CHANNEL
	FRAME SYNCHRONIZATION	4 KBPS DATA LINK	CRC	INFORMATION SIGNAL BIT	CONTROL SIGNAL BIT	
1		m		1-8		
2			CB1	1-8		
3		m		1-8		
4	0			1-8		
5		m		1-8		
6			CB2	1-7	8	A
7		m		1-8		
8	0			1-8		
9		m		1-8		
10			CB3	1-8		
11		m		1-8		
12	1			1-7	8	B
13		m		1-8		
14			CB4	1-8		
15		m		1-8		
16	0			1-8		
17		m		1-8		
18			CB5	1-7	8	C
19		m		1-8		
20	1			1-8		
21		m		1-8		

FRAME NO.	S BIT			BIT NO. OF EACH CHANNEL (CH1-CH24)		SIGNAL CHANNEL
	FRAME SYNCHRONIZATION	4 KBPS DATA LINK	CRC	INFORMATION SIGNAL BIT	CONTROL SIGNAL BIT	
22			CB6	1-8		
23		m		1-8		
24	1			1-7	8	D

* The S-bit is the first bit in each frame.

* Frames are repeated in the order shown above.

* Frames 6, 12, 18 and 24 become signal frames.

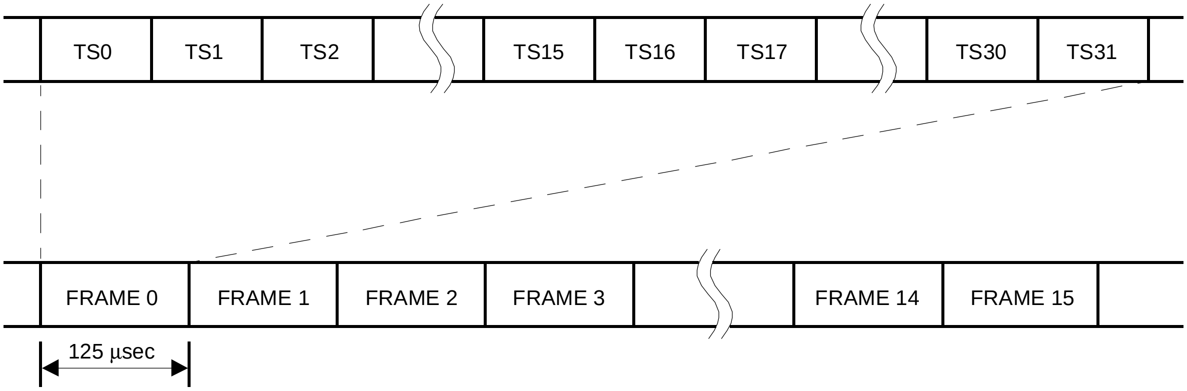
* “m” in the “4 kbps Data Link” column means that the frame is usually assigned to 1.

Frame Configuration of 30-DTI

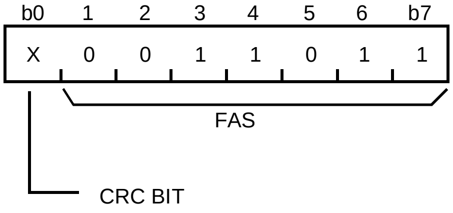
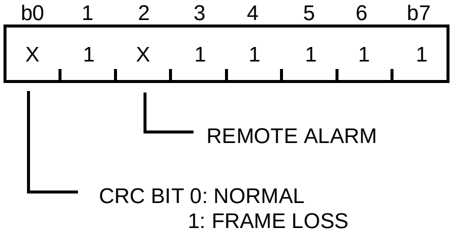
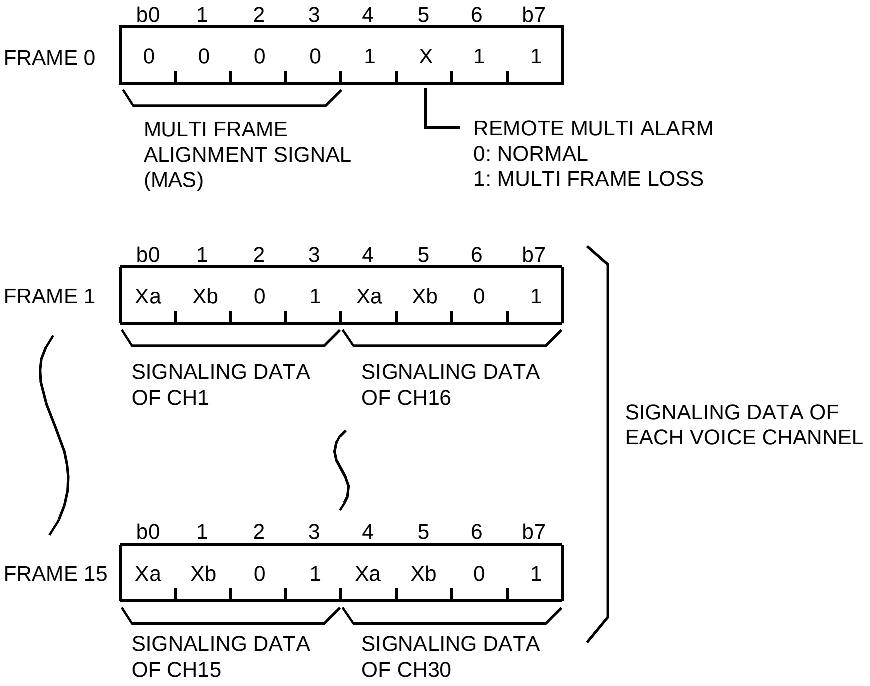
Based on 30-Channel transmission method of ITU-T Specification, the frame configuration consists of 16-multi frame, each frame having 31 Time Slots.

The figure below shows the frame configuration, and the table on next page shows the details of Time Slot assignment.

Frame Configuration of 30-DTI



Time Slot Assignment of 30-DTI

TIME SLOT NO.	EVEN NO. FRAME	ODD NO. FRAME
TS0	Frame Alignment Signal (FAS) 	 b0 1 2 3 4 5 6 b7 X 1 X 1 1 1 1 1 REMOTE ALARM CRC BIT 0: NORMAL 1: FRAME LOSS
TS1-TS15	Voice Channel CH1-CH15	
TS16	• Associated Channel Signaling:  FRAME 0 b0 1 2 3 4 5 6 b7 0 0 0 0 1 X 1 1 MULTI FRAME ALIGNMENT SIGNAL (MAS) REMOTE MULTI ALARM 0: NORMAL 1: MULTI FRAME LOSS FRAME 1 b0 1 2 3 4 5 6 b7 Xa Xb 0 1 Xa Xb 0 1 SIGNALING DATA OF CH1 SIGNALING DATA OF CH16 SIGNALING DATA OF EACH VOICE CHANNEL FRAME 15 b0 1 2 3 4 5 6 b7 Xa Xb 0 1 Xa Xb 0 1 SIGNALING DATA OF CH15 SIGNALING DATA OF CH30	
TS17-TS31	Voice Channel CH17-CH31	

Programming 24-DTI Assignment

1. Tie Line Interface

START	DESCRIPTION	DATA
CM05	Assign an AP number to the DTI card. The AP number must match the SENSE switch setting on the DTI card. **INITIAL**	• Y=0 (1) 04-15, 20-31: AP No. (2) 09: DTI card
	Specify the AP Highway Channel for 24-DTI card. **INITIAL**	• Y=1 (1) 04-15, 20-31: AP No. (2) 0 : Use Expanded Highway Channel (128 Time Slots) 1◀: Use Basic Highway Channel (128 Time Slots)
CM07	Assign trunk numbers to each Channel Number on the DTI card. **INITIAL** The system allocates Time Slots to consecutive channels from the lowest to the highest Channel Number assigned. To minimize the number of Time Slots allocated, assign trunk numbers to consecutive channels on each card. Never skip channels in CM07.	• YY=01 (1) XX ZZ XX : 04-15, 20-31: AP No. assigned by CM05 Y=0 ZZ : 00-23: Channel No. of 24-DTI (2) D000-D255: Trunk No. Any trunk number already assigned by CM10 cannot be used.
A		

A

DESCRIPTION	DATA

CMAA

Assign the necessary functions to the DTI card.

DTI INITIAL

After entering the data, set the MB switch on the DTI card to UP, and then to DOWN, for DTI initialization.

Note: *The following table shows the relationship between CMAA YY=01 and CMAA YY=02.*

CMAA YY=01 (FRAME CONFIGURATION)	CMAA YY=02 (ZERO CODE SUPPRESSION)	SIGNALING
24-Multi Frame [1]		B8ZS
12-Multi Frame [0]	Not available [1]	Transparent
	Available [0]	B7

[ ]: Indicates 2nd data

- YY=00 Data Mode

(1) 04-15, 20-31: AP No. assigned by CM05 Y=0
(2) 0: Based on AT&T Specification

- YY=01 Frame Configuration

(1) 04-15, 20-31: AP No. assigned by CM05 Y=0
(2) 0 : 12-Multi Frame (D4)
1◀: 24-Multi Frame (ESF)

- YY=02 Zero Code Suppression

(1) 04-15, 20-31: AP No. assigned by CM05 Y=0
0 : Available (Non Transparent)
(2) 1◀: Not available (Transparent)

YY=03
- 04-15, 20-31: AP No. assigned by CM05

(1) Y=0
7◀: Associated Channel Interoffice
(2) Signaling

CM30

Assign a trunk route number for tie line interface to each DTI.

Note: *The DTI route must be separated from any analog trunk route.*

- YY=00

(1) 000-255 : Trunk No. assigned by CM07 YY=01
(2) 00-63 : Trunk Route No.

CM35

Assign trunk route data to each DTI route.

- YY=00 Kind of Trunk Route

(1) 00-63 : Trunk Route No.
(2) 04 : Tie line trunk

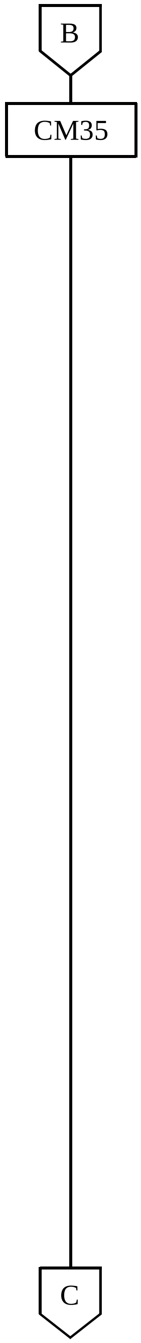
- YY=01 Dialing Signal Type

(1) 00-63 : Trunk Route No.
(2) 7◀ : DP/DTMF (Incoming)
DTMF (Outgoing)

- YY=04

Answer signal from distant office
(1) 00-63 : Trunk Route No.
(2) 2 : Answer signal arrives

B



DESCRIPTION

CM35 YY=19 DTI PAD

CONNECTION PATTERNS	PAD DATA OF DTI [dB]			
	DATA =4 (T/R)	DATA =5 (T/R)	DATA =6 (T/R)	DATA =7 (T/R)
Station-DTI	–3/–8	–3/–3	–3/–3	–3/–8
Tone-DTI	0/0	0/0	0/0	0/0
COT/DID/LDT/ ODT (2W E&M)-DTI	0/0	0/0	0/0	0/0
ODT (4W E&M)-DTI	+3/–3	0/0	0/0	+3/–3
DTI/BRT/PRT/ CCT-DTI	0/–6	0/0	0/–6	0/0

T/R : Transmitter PAD/Receiver PAD
+ : Gain
– : Loss

DATA

- YY=05
  Release Signal from distant office

(1) 00-63 : Trunk Route No.
(2) 1◀ : Release signal arrives

- YY=09 Incoming Connection Signaling

(1) 00-63 : Trunk Route No.
(2) 03 : Wink Start
04 : Delay Dial
05 : Immediate Start
06 : 2nd DT/Timing Start-Tie line

- YY=19 DTI Pad

(1) 00-63 : Trunk Route No.
(2) 0-3 : Programmable PAD (See CM42)
4-7◀ : Fixed PAD (See left table)

- YY=20 Sender start condition

(1) 00-63 : Trunk Route No.
(2) 00 : Wink Start
01 : Delay Dial
02 : Ground Start
15◀ : Timing Start

C

DESCRIPTION | **DATA**

CM42

To use the programmable PAD (CM35 YY=19, 2nd Data=0-3), assign the PAD data by CM42.

(1) 50-65: See the table below.
(2) 00-15: See the table below.

PATTERN / 1ST DATA	PAD DATA PATTERNS				CONNECTING PATTERNS
	CM35 YY=19 2ND DATA=0	CM35 YY=19 2ND DATA=1	CM35 YY=19 2ND DATA=2	CM35 YY=19 2ND DATA=3	
50 ≀ 65	50	54	58	62	STA/TONE-DTI
	51	55	59	63	COT/DID/LDT-DTI
	52	56	60	64	ODT-DTI
	53	57	61	65	DTI/BRT/PRT/CCT/CFTC-DTI

PATTERNS / 2ND DATA		PAD DATA OF DTI (T/R) [dB]	REMARKS
00 ≀ 15	00	0/0	
	01	–2/–2	
	02	–3/–3	
	03	0/–6	
	04	–3/–8	
	05	+3/–3	
	06	–6/–6	
	07	–8/–8	
	08 ≀ 15	Not Used	

T/R : Transmitter PAD/Receiver PAD
+ : Gain
– : Loss

D

D

	DESCRIPTION	DATA
CM41	Specify the various timing, if required.	• Y=3 (1) 00: Release Signal Detect Timing (2) 01-15: 64 ms.-960 ms. (64 ms. increments) If no data is set, the default setting is 128 ms. • Y=3 (1) 01: Answer Signal Detect Timing (2) 01-15: 32 ms.-480 ms. (32 ms. increments) If no data is set, the default setting is 128 ms. • Y=3 (1) 02: Wink Signal width (2) 01-15: 64 ms.-512 ms. (32 ms. increments) If no data is set, the default setting is 32 ms. • Y=3 (1) 03: Wink/Delay Detection Time-out (2) 01-15: 1 sec.-15 sec. (1 sec. increments) If no data is set, the default setting is 7 seconds
CM20	Assign an access code for the DTI trunk route. **Note:** *The Least Cost Routing or Route Advance feature is available for call origination via the DTI.* *Refer to the following feature programming:* *LEAST COST ROUTING-3/6 DIGIT on Page 303.* *ROUTE ADVANCE on Page 424.*	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) 100-163: Trunk Route 00-63

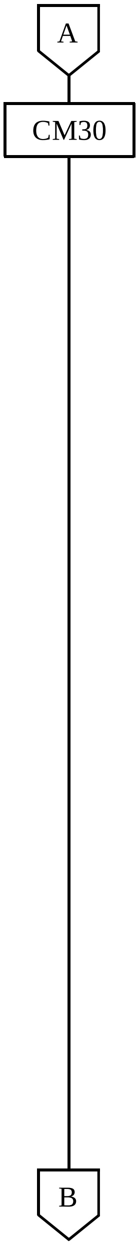
END

2. C.O. Line Interface

START	DESCRIPTION	DATA
CM05	Assign an AP number to the DTI card. The AP number must match the SENSE switch setting on the DTI card. **INITIAL**	• Y=0 (1) 04-15, 20-31: AP No. (2) 09: DTI card
	Specify the AP Highway Channel for 24-DTI card. **INITIAL**	• Y=1 (1) 04-15, 20-31: AP No. (2) 0 : Use Expanded Highway Channel (128 Time Slots) 1◀: Use Basic Highway Channel (128 Time Slots)
CM07	Assign trunk numbers to each Channel Number on the DTI card. **INITIAL** The system allocates Time Slots to consecutive channels from the lowest to highest Channel Number assigned. To minimize the number of Time Slots allocated, assign trunk numbers to consecutive channels on each card. Never skip channels in CM07.	• YY=01 (1) XX ZZ XX: 04-15, 20-31: AP No. assigned by CM05 Y=0 ZZ: 00-23: Channel No. of 24-DTI (2) D000-D255: Trunk No. Any trunk number already assigned by CM10 cannot be used.
CMAA	Assign the necessary functions to the DTI card. **DTI INITIAL** After entering the data, set the MB switch on the DTI card to UP, and then to DOWN, for DTI initialization. **Note:** *The following table shows the relationship between CMAA YY=01 and CMAA YY=02.*	• YY=00 Data Mode (1) 04-15, 20-31: AP No. assigned by CM05 Y=0 (2) 0: Based on AT&T Specifications • YY=01 Frame Configuration (1) 04-15, 20-31: AP No. assigned by CM05 Y=0 (2) 0 : 12-Multi Frame (D4) 1◀: 24-Multi Frame (ESF) • YY=02 Zero Code Suppression (1) 04-15, 20-31: AP No. assigned by CM05 Y=0 (2) 0 : Available (Non Transparent) 1◀: Not available (Transparent) • YY=03 (1) 04-15, 20-31: AP No. assigned by CM05 Y=0 (2) 7◀: Associated Channel Interoffice Signaling
A		

CMAA YY=01 (FRAME CONFIGURATION)	CMAA YY=02 (ZERO CODE SUPPRESSION)	SIGNALING
24-Multi Frame [1]		B8ZS
12-Multi Frame [0]	Not available [1]	Transparent
	Available [0]	B7

[ ]: Indicates 2nd data



DESCRIPTION	DATA
Assign a trunk route number for C.O.line Interface to each DTI. **Note:** *The DTI route must be different than any analog trunk route.*	• YY=00 (1) 000-255: Trunk No. assigned by CM07 YY=01 (2) 00-63: Trunk Route No.
Specify the terminating system in Day Mode or Night Mode, Mode A, or Mode B for incoming C.O. calls.	• YY=02 Day Mode • YY=03 Night Mode • YY=40 Mode A • YY=41 Mode B (1) 000-255: Trunk No. assigned by CM07 YY=01 (2) 02 : Trunk-Direct Appearances 03 : Trunk-Direct Appearances + TAS 04 : Direct-In Termination 08 : Dial-in 09 : Automated Attendant 10 : Attendant Console + TAS 11 : Attendant Console + Trunk-Direct Appearances 12 : Attendant Console + Trunk-Direct Appearances + TAS 13 : TAS 14 : Attendant Console 16 : DISA 18 : ISDN Indial 31◀: DID, Tie Line and any call which is not handled by PBX

B

	DESCRIPTION	DATA
CM35	Assign trunk route data to each DTI route.	See below

CM35

Assign trunk route data to each DTI route.

- YY=00 Kind of Trunk Route

(1) 00-63: Trunk Route No.
(2) 00: DDD (C.O./DID) trunk
01: FX trunk
02: WATS trunk
03: CCSA trunk
04: Tie line trunk

- YY=01 Dialing signal type

(1) 00-63: Trunk Route No.
(2)

	Incoming	Outgoing
2 :	DP	DP
4 :	DTMF	DTMF
7◀:	DP/DTMF	DTMF

- YY=04
Answer signal from distant office

(1) 00-63: Trunk Route No.
(2) 2 : Answer signal arrives
7◀: Answer signal does not arrive

- YY=05
Release signal from distant office

(1) 00-63: Trunk Route No.
(2) 0 : Release signal does not arrive (Loop Start C.O. line without Release signal)
1◀: Release signal arrives (Ground Start/Loop Start with Release signal)

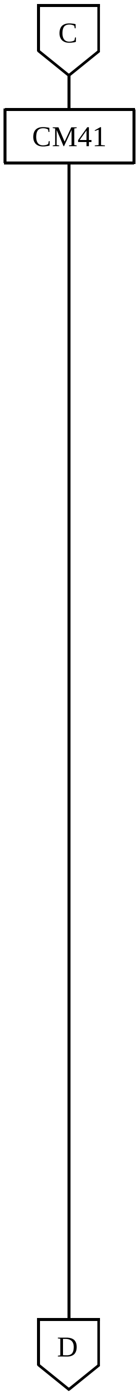
- YY=09 Incoming connection signaling

(1) 00-63: Trunk Route No.
(2) 01 : Ring Down (Ground Start C.O. line)
15◀: Ring Down (Loop Start C.O. line)

- YY=20 Sender start condition

(1) 00-63: Trunk Route No.
(2) 02 : Ground Start
15◀: Timing Start (Loop Start)

C



DESCRIPTION	DATA
Specify the various timing for the DTI trunk, if required.	• Y=3 (1) 04: Ringing Signal Detect Timing (2) 01-15: 32 ms.-480 ms. (32 ms. increments) If no data is set, the default setting is 192 ms. • Y=3 (1) 05: Release Signal Detect Timing (2) 01-15: 64 ms.-960 ms. (64 ms. increments) If no data is set, the default setting is 512 ms. • Y=3 (1) 06: Answer Signal Detect Timing (2) 01-15: 64 ms.-960 ms. (64 ms. increments) If no data is set, the default setting is 576 ms. • Y=3 (1) 07: Ringing Signal Detect Time out (2) 01-15: 512 ms.-7,680 ms. (512 ms. increments) If no data is set, the default setting is 7,168 ms. • Y=3 (1) 08: Guard Timing of DTI release (2) 01-15: 128 ms.-1,920 ms. (128 ms. increments) If no data is set, the default setting is 512 ms. • Y=3 (1) 09: Hooking Signal sending timing (2) 01-15: 64 ms.-960 ms. (64 ms. increments) If no data is set, the default setting is 640 ms.

D

	DESCRIPTION	DATA
CM41		• Y=3 (1) 10: Ground Start Release (Loop off) Detect Timing (2) 01-15: 64 ms.-960 ms. (64 ms. increments) If no data is set, the default setting is 384 ms. • Y=3 (1) 11: Ground Start Release (Ground off) Detect Timing (2) 01-15: 64 ms.-960 ms. (64 ms. increments) If no data is set, the default setting is 384 ms. • Y=3 (1) 12: Ground Start (Return Ground) Detect Time out (2) 01-15: 1 sec.-15 sec. (1 sec. increments) If no data is set, the default setting is 7 seconds
CM20	Assign an access code for the DTI trunk route used as a C.O.line interface. **Note:** *The Least Cost Routing or Route Advance feature is also available for call origination via the DTI.* *Refer to the following feature programming.* *LEAST COST ROUTING-3/6 DIGIT on Page 303.* *ROUTE ADVANCE on Page 424.*	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) 100-163: Trunk Route 00-63

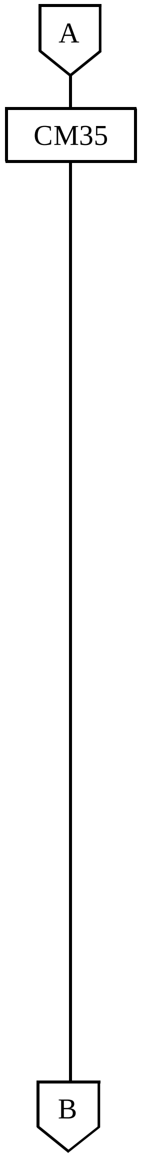
END

Programming 30-DTI Assignment

START

	DESCRIPTION	DATA
CM05	Assign an AP number to the DTI card. The AP number assigned must match the SENSE switch setting on the DTI card. **INITIAL**	• Y=0 (1) 04-15, 20-31: AP No. (2) 09: DTI card
CM07	Assign trunk number to each Channel Number on the DTI card. Channel 0 and 16 cannot be assigned. **INITIAL** **Note:** *The system allocates Time Slots to consecutive channels from lowest to the highest Channel Number assigned.* *To minimize the number of Time Slots allocated, assign trunk numbers to consecutive channels on each card.* *Never skip channels in CM07.*	• YY=01 (1) XX ZZ XX : 04-15, 20-31: AP No. assigned by CM05 Y=0 ZZ : 01-15, 17-31: Channel No. of 30-DTI (2) D000-D255: Trunk No. Any trunk number already assigned by CM10 cannot be used.
CM30	Assign a trunk route number to each DTI. **Note:** *DTI route must be separated from any analog trunk route.*	• YY=00 (1) 000-255: Trunk No. assigned by CM07 YY=01 (2) 00-63: Trunk Route No.
CM35	Assign the trunk route data to each DTI route.	• YY=00 Kind of Trunk Route (1) 00-63: Trunk Route No. (2) 04: Tie line trunk • YY=01 Dialing signal type (1) 00-63: Trunk Route No. (2) 7◀: DP/DTMF (Incoming) DTMF (Outgoing) • YY=04 Answer signal from distant office (1) 00-63: Trunk Route No. (2) 2: Answer signal arrives

A



DESCRIPTION

CM35 YY=19 DTI PAD

CONNECTION PATTERNS	PAD DATA OF DTI [dB]			
	DATA =4 (T/R)	DATA =5 (T/R)	DATA =6 (T/R)	DATA =7 (T/R)
Station-DTI	–3/–8	–3/–3	–3/–3	–3/–8
Tone-DTI	0/0	0/0	0/0	0/0
COT/DID/LDT/ODT (2W E&M)-DTI	0/0	0/0	0/0	0/0
ODT (4W E&M)-DTI	+3/–3	0/0	0/0	+3/–3
DTI/BRT/PRT/CCT-DTI	0/–6	0/0	0/–6	0/0

T/R : Transmitter PAD/Receiver PAD
+ : Gain
– : Loss

DATA

- YY=05 Release signal from distant office

(1) 00-63: Trunk Route No.
(2) 1◀: Release signal arrives

- YY=09 Incoming connection signaling

(1) 00-63: Trunk Route No.
(2) 03: Wink Start
04: Delay Dial
05: Immediate Start
06: 2nd DT/Timing Start-Tie line

- YY=19 DTI PAD

(1) 00-63: Trunk Route No.
(2) 0-3 : Programmable PAD (See CM42)
4-7◀: Fixed PAD (See left table)

- YY=20 Sender start condition

(1) 00-63: Trunk Route No.
(2) 00 : Wink Start
01 : Delay Dial
02 : Ground Start
15◀: Timing Start

- YY=89 Cyclic Redundancy Checking for DTI trunk

(1) 00-63: Trunk Route No.
(2) 0: To provide

B

	DESCRIPTION	**DATA**
CM42	To use the programmable PAD (CM35 YY=19, 2nd Data=0-3), assign the PAD data by CM42.	(1) 50-65: See the table below. (2) 00-15: See the table below.

PATTERNS **1ST DATA**	**PAD DATA PATTERNS**				**CONNECTING PATTERNS**
	CM35 YY=19 2ND DATA=0	**CM35 YY=19 2ND DATA=1**	**CM35 YY=19 2ND DATA=2**	**CM35 YY=19 2ND DATA=3**	
50 ≀ 65	50	54	58	62	STA/TONE-DTI
	51	55	59	63	COT/DID/LDT-DTI
	52	56	60	64	ODT-DTI
	53	57	61	65	DTI/BRT/PRT/CCT/CFTC-DTI

PATTERNS **2ND DATA**		**PAD DATA OF DTI (T/R) [dB]**	**REMARKS**
00 ≀ 15	00	0/0	
	01	–2/–2	
	02	–3/–3	
	03	0/–6	
	04	–3/–8	
	05	+3/–3	
	06	–6/–6	
	07	–8/–8	
	08 ≀ 15	Not Used	

T/R : Transmitter PAD/Receiver PAD
+ : Gain
– : Loss

C

	DESCRIPTION	**DATA**
C		
CM41	Specify the various timing parameters, if required.	- Y=3 (1) 00: Release Signal Detect Timing (2) 01-15: 64 ms.-960 ms. (64 ms. increments) If no data is set, the default setting is 128 ms. - Y=3 (1) 01: Answer Signal Detect Timing (2) 01-15: 32 ms.-480 ms. (32 ms. increments) If no data is set, the default setting is 128 ms. - Y=3 (1) 02: Wink Signal width (2) 01-15: 64 ms.-512 ms. (32 ms. increments) If no data is set, the default setting is 32 ms. - Y=3 (1) 03: Wink/Delay Detection Time-out (2) 01-15: 1 sec.-15 sec. (1 sec. increments) If no data is set, the default setting is 7 seconds
CM20	Assign an access code for the DTI trunk route. **Note:** *The Least Cost Routing or Route Advance feature is also available for call origination via the DTI.* *Refer to the following feature programming:* *LEAST COST ROUTING-3/6 DIGIT on Page 303.* *ROUTE ADVANCE on Page 424.*	- Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) 100-163: Trunk Route 00-63
END		

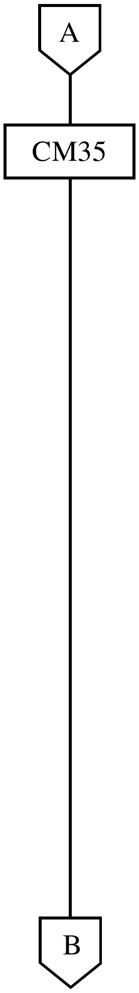
DIRECT INWARD DIALING (DID)

Programming

START

	DESCRIPTION	DATA
CM08	Assign the ring cadence on a Direct Inward Dialing.	(1) 180 (2) 0 : 0.4 sec. ON, 0.2 sec. OFF, 0.4 sec. ON, 2 sec. OFF 1◀ : As per CM35 YY=33 or CM76=YY=22
CM10	Assign the trunk numbers to the required LEN.	(1) 000-763 : LEN (2) D000-D255 : Trunk No.
CM30	Assign the data for DID to the trunk numbers assigned by CM10.	• YY=00 Trunk Route Allocation (1) 000-255: Trunk No. (2) 00-63 : Trunk Route No. • YY=01 Tenant Allocation (1) 000-255: Trunk No. (2) 00-63 : Tenant No. 01◀ : Tenant No. • YY=02 Terminating System in Day Mode • YY=03 Terminating System in Night Mode • YY=40 Terminating System in Mode A • YY=41 Terminating System in Mode B (1) 000-255: Trunk No. (2) 31◀ : DID, Tie line and any call which is not handled by the PBX

A



DESCRIPTION

Assign the data for DID to the trunk routes assigned by CM30 YY=00.

Note: *When 2nd data is set to “1”, the Trunk ID number assigned by CM30 YY=19 is displayed.*

DATA

- YY=00 Kind of Trunk Route

(1) 00-63: Trunk Route No.
(2) 00: DID trunk

- YY=02 Call direction

(1) 00-63: Trunk Route No.
(2) 1: Incoming trunk

- YY=05 Release Signal from distant office

(1) 00-63: Trunk Route No.
(2) 1◀: Release Signal arrives

- YY=09 Incoming connection signaling

(1) 00-63: Trunk Route No.
(2) 06: 2nd DT/Timing Start-Tie Line

- YY=75 DID incoming LDN display on D^{term}/ATTCON/DESKCON

(1) 00-63: Trunk Route No.
(2) 0: Available
1◀: Not available **Note**

	DESCRIPTION	DATA
B		
CM45	Provide dedicated DTMF Receivers for DID calls, if required.	• Y=1 (1) XX Z: DTMF Receiver No. XX: 00: Built-in PBR on MP card 01-15: 8RST Card No. (E201-E215) assigned by CM10 Z: 0-3: Circuit No. (2) 0: Only for incoming call from DID 1◀: For both DTMF station and Tie Line/DID
CM49	Assign the function of each Digital Announcement Trunk, if needed.	• YY=00 (1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk Card No. (EB002-EB127) assigned by CM10 (2) 0D00: Announcement Service when the called station does not answer the DID/Tie Line call 0E00: Announcement Service when the DID/Tie Line call terminates to the busy station
CM51	Assign the destination of DID call transferred when the station is busy/unassigned/no answer. **Note:** *When Announcement Service is provided for No Answer (CM51 YY=00) or Busy (CM51 YY=03), see ANNOUNCEMENT SERVICE on Page 16.* *When Announcement Service is provided for unassigned (CM51 YY=06), see INTERCEPT ANNOUNCEMENT on Page 291.*	• YY=00 No Answer • YY=03 Busy • YY=06 Unassigned (1) 00-63: Tenant No. (2) Destination: X-XXXXXXXX: Station No. E000: Attendant Console EB000-EB127: Digital Announcement Trunk No. assigned by CM10 **Note**
C		

C	DESCRIPTION	DATA
CM76	Assign the Number Conversion Block number. **Note:** *When the Expansion Memory card (PZ-M537) is not mounted on the MP card, the 2nd data is 000-499.*	• YY=00 X-XXXX: DID No. 000-999: Number Conversion Block No. 000-999 **Note**
	When the data for CM35 YY=18 is set to “0” (Received Digits Conversion is to be provided), assign the data for interpreting the digits received.	• YY=01 Day Mode • YY=02 Night Mode • YY=03 Mode A • YY=04 Mode B (1) 000-999: Number Conversion Block No. assigned by CM76 YY=00 (2) X-XXXXXXXX: Station No. to be terminated DXX: Change Terminating System to: D02: Trunk-Direct Appearance D03: Trunk-Direct Appearance+TAS D04: Direct-In Termination D09: Automated Attendant D10: Attendant Console+TAS D11: Attendant Console+Trunk-Direct Appearance D12: Attendant Console+Trunk-Direct Appearance+TAS D13: TAS D14: Attendant Console D16: DISA
END		

To assign the destination tenant for Day/Night Mode and Mode A/B, when DID call terminates [when CM76 YY=01/02/03/04 is set to "D13" (TAS)]:

START	DESCRIPTION	DATA
CM76	Assign the tenant for Day/Night Mode, Mode A/B per each station number received on DID call.	• YY=05 Day Mode • YY=06 Night Mode • YY=07 Mode A • YY=08 Mode B (1) 000-999: Number Conversion Block No. assigned by CM76 YY=00/90 (2) 00-63: Trunk Tenant No.
END		

To assign the destination tenant for Day/Night Mode and Mode A/B, when DID call terminates (when CM76 YY=01/02/03/04 is set to "station number to be terminated"):

[Series 2200 (R3.1) software required]

START	DESCRIPTION	DATA
CM12	Assign a tenant number to each station assigned by CM76 YY=01/02/03/04.	• YY=04 (1) X-XXXXXXXX: Station No. assigned by CM76 YY=01/02/03/04 (2) 00-63: Tenant No. 01◀: Tenant No.
CM76	Assign the terminating station tenant for each DID number during Day/Night Mode, Mode A/B.	• YY=18 Day Mode • YY=19 Night Mode • YY=20 Mode A • YY=21 Mode B (1) 000-999: Number Conversion Block No. assigned by CM76 YY=00/90 (2) 00-63: Station Tenant No. NONE◀: Trunk Tenant
END		

Hardware Required

4DIT card (DID Trunk)
EXPMEM card on MP card

DID Call Waiting

Programming

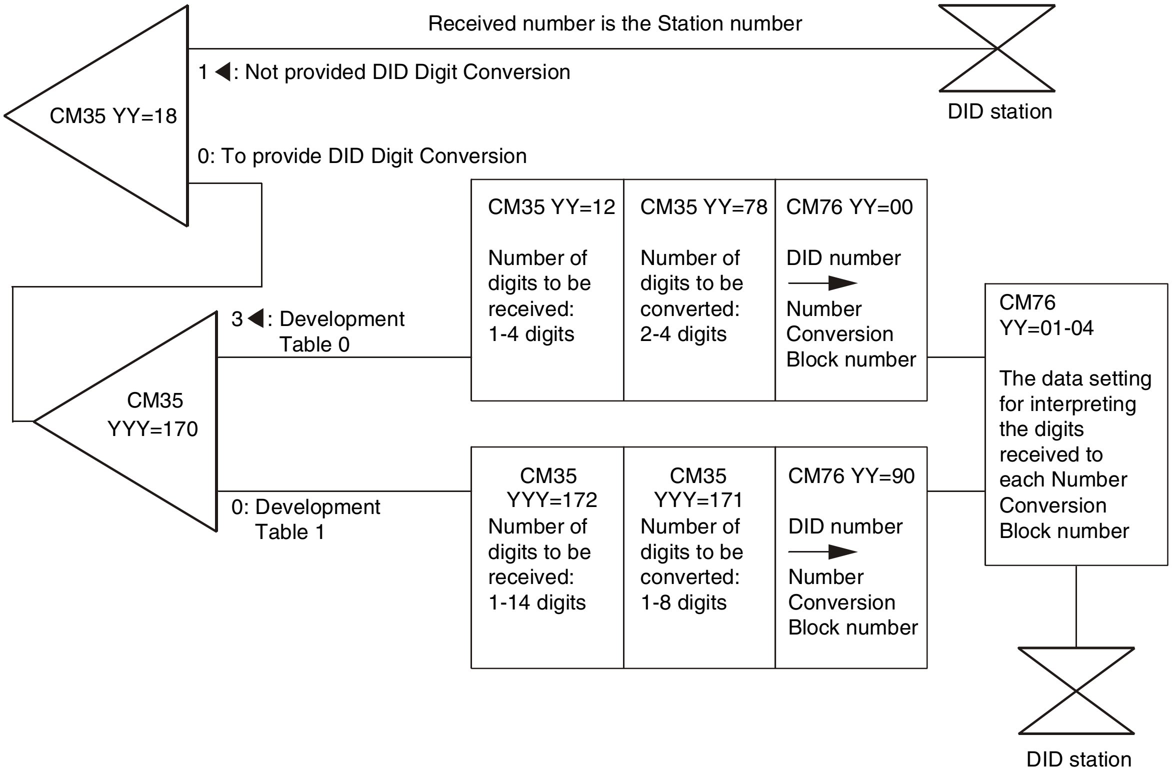
	DESCRIPTION	DATA
START		
CM08	Specify the Camp-On tone sent to a busy station by Camp-On Call Waiting Method.	(1) 367 (2) 0: Every 4 sec. 1◀: Only once
CM12	Assign the Service Restriction Class A for the Call Waiting feature to the required stations.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Call Waiting Answer from called side in the Service Restriction Class A assigned by CM12 YY=02.	• YY=44 Call Waiting Answer from called side (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM35	Assign the data for DID Call Waiting to the trunk routes assigned by CM30.	• YY=59 Call Waiting for DID call (1) 00-63: Trunk Route No. (2) 0: To provide
CM42	Specify the number of times for Call Waiting Tone. **Note:** *CM42>18 is effective when the 2nd data of CM08>367 is “0”.*	(1) 18 (2) 01-99: Number of times If no data is set, the default setting is for no limit.
CM76	Specify Call Waiting for DID call per incoming LDN number, if required. **Note:** *CM76 YY=10 is effective when the 2nd data of CM35 YY=18 is “0” (received Digits Conversion is to be provided).*	• YY=10 (1) 000-999: Number Conversion Block No. assigned by CM76 YY=00/90 (2) 0: Restricted 1◀: Allow
END		

DID Digit Conversion

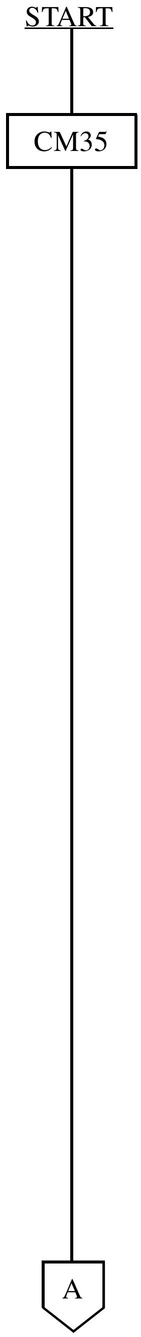
Programming Summary for DID Digit Conversion

1. Specify whether the DID Digit Conversion is provided for each trunk route by CM35 YY=18.
2. To provide the DID Digit Conversion, set the following data.
   - Specify the Development Table for DID Digit Conversion to each trunk route by CM35 YYY=170.
   - Assign the number of digits to be received on DID and the number of digits to be converted on DID to each trunk route/each Development Table by CM35 YY=12, 78/ CM35 YYY=171, 172.
   - Set the Number Conversion Block number for each Development Table by CM76 YY=00, 90
   - Assign the data for interpreting the received digits to each Number Conversion Block number by CM76 YY=01-04.

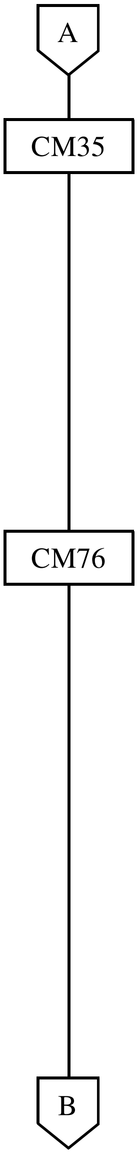
Programming Procedure for DID Digit Conversion


Received number is the Station number
1 ◀: Not provided DID Digit Conversion
CM35 YY=18
DID station
0: To provide DID Digit Conversion
CM35 YY=12
Number of digits to be received: 1-4 digits
CM35 YY=78
Number of digits to be converted: 2-4 digits
CM76 YY=00
DID number → Number Conversion Block number
3 ◀: Development Table 0
CM35 YYY=170
0: Development Table 1
CM35 YYY=172
Number of digits to be received: 1-14 digits
CM35 YYY=171
Number of digits to be converted: 1-8 digits
CM76 YY=90
DID number → Number Conversion Block number
CM76 YY=01-04
The data setting for interpreting the digits received to each Number Conversion Block number
DID station

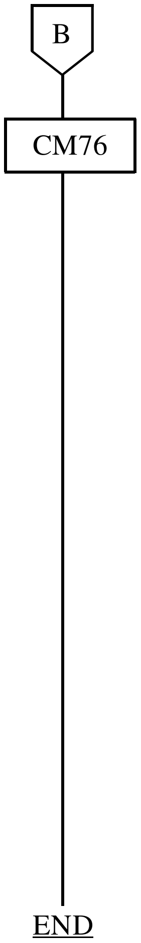
Programming



DESCRIPTION	DATA
Provide DID Digit Conversion to the trunk route number assigned by CM30 YY=00.	• YY=18 (1) 00-63: Trunk Route No. (2) 0: To provide
Specify the Development Table for DID Digit Conversion. **[Series 2300 (R4.1) software required]** **Note 1:** *The Development Table 1 is available when the Expansion Memory card (PZ-M537) is mounted on the MP card.* **Note 2:** *When using the Development Table1, see Sample Data Programming on Page 225-6.*	• YYY=170 (1) 00-63: Trunk Route No. (2) 0: Development Table 1 3◀: Development Table 0
Specify the number of digits to be received on DID for Development Table 0.	• YY=12 (1) 00-63: Trunk Route No. (2) Number of digits 0: 1 digit 1: 2 digits 2: 3 digits 3◀ : 4 digits
Specify the number of digits to be converted on DID for Development Table 0.	• YY=78 (1) 00-63: Trunk Route No. (2) 0: Leading 2-4 digits 1◀: All digits of DID number are converted by CM76



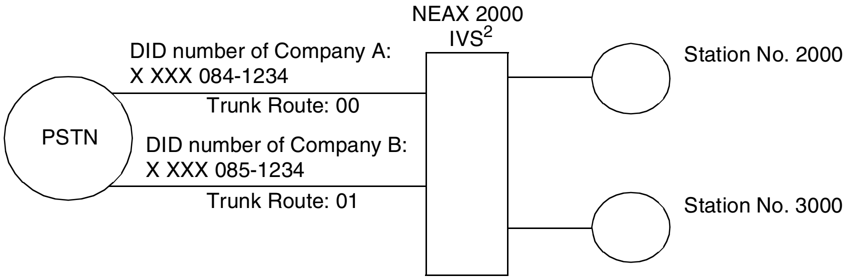
DESCRIPTION	DATA
Specify the number of digits to be received on DID for Development Table 1. **[Series 2300 (R4.1) software required]**	• YYY=172 (1) 00-63: Trunk Route No. (2) Number of digits 01-14: 1-14 digits 15◀: 4 digits
Specify the number of digits to be converted on DID for Development Table 1. **[Series 2300 (R4.1) software required]**	• YYY=171 (1) 00-63: Trunk Route No. (2) 01-08: 1-8 digits 15◀: 4 digits
Assign the Number Conversion Block number for Development Table 0. **Note:** *When the Expansion Memory card (PZ-M537) is not mounted on the MP card, the 2nd data is 000-499.*	• YY=00 (1) X-XXXX: DID No. (2) 000-999: Number Conversion Block No. **Note**
Assign the Number Conversion Block number for Development Table 1. **[Series 2300 (R4.1) software required]** **Note:** *CM76 YY=90 is available only when the Expansion Memory card (PZ-M537) is mounted on the MP card.*	• YY=90 (1) X-XXXXXXXX: DID No. (2) 000-999: Number Conversion Block No. **Note**



DESCRIPTION	DATA
Assign the data for interpreting the digits received.	• YY=01 Day Mode • YY=02 Night Mode • YY=03 Mode A • YY=04 Mode B (1) 000-999: Number Conversion Block No. assigned by CM76 YY=00/90 (2) X-XXXXXXXX: Station No. to be terminated DXX: Change Terminating System to: D02: Trunk-Direct Appearances D03: Trunk-Direct Appearances + TAS D04: Direct-In Termination D09: Automated Attendant D10: Attendant Console + TAS D11: Attendant Console + Trunk-Direct Appearances D12: Attendant Console + Trunk-Direct Appearances + TAS D13: TAS D14: Attendant Console D16: DISA

Sample Data Programming

- The PBX provides DID lines of multiple telecommunication companies (company A, company B), and when the PBX receives the calls that have the same lower four digits of DID number from each telecommunication company, the calls are terminated to each station which have been specified.
- DID No.: X XXX 084-1234 (DID number of company A)
  X XXX 085-1234 (DID number of company B)
- Trunk Route No.: 00 (for DID line of company A)
  01 (for DID line of company B)
- Station No.: 2000 (for DID line of company A)
  3000 (for DID line of company B)



The lower five digits in DID numbers of Company A and Company B are converted by Development Table 1.

Data Programming

COMMAND	1ST DATA	2ND DATA	REMARKS
CM35 YY=18	00	0	Provide DID Digit Conversion to the trunk route number 00.
CM35 YY=18	01	0	Provide DID Digit Conversion to the trunk route number 01.
CM35 YYY=170	00	0	Specify the Development Table 1 for DID digit conversion to the trunk route number 00.
CM35 YYY=170	01	0	Specify the Development Table 1 for DID digit conversion to the trunk route number 01.
CM35 YYY=172	00	07	Specify the number of digits to be received on DID for Development Table1 as 7 digits to trunk route number 00.
CM35 YYY=172	01	07	Specify the number of digits to be received on DID for Development Table1 as 7 digits to trunk route number 01.
CM35 YYY=171	00	05	Specify the number of digits to be converted on DID for Development Table1 as 5 digits to trunk route number 00.
CM35 YYY=171	01	05	Specify the number of digits to be converted on DID for Development Table1 as 5 digits to trunk route number 01.
CM76 YY=90	41234	000	Assign the Number Conversion Block number 000 to the DID number 41234.
CM76 YY=90	51234	001	Assign the Number Conversion Block number 001 to the DID number 51234.
CM76 YY=01	000	2000	Assign the station number 2000 to the Number Conversion Block number 000.
CM76 YY=01	001	3000	Assign the station number 3000 to the Number Conversion Block number 001.

DID Name Display

[Series 2200 (R3.1) software required]

Programming

START

	DESCRIPTION	DATA
CM76	Assign the DID name to the Number Conversion Block number assigned by CM76 YY=00/90 with character or character code. **Note 1:** *When the Expansion Memory card (PZ-M537) is not mounted on the MP card, the 2nd data is 000-049.* **Note 2:** *Number Conversion Block No. 200-999 cannot be used for this assignment.*	• YY=24 (1) 000-199: Number Conversion Block No. assigned by CM76 (2) YY=00/90 XX...XX: Character (Max.16 characters) X: 0-9, A-Z
		• YY=25 (1) 000-199: Number Conversion Block No. assigned by CM76 (2) YY=00/90 20-7F: Character Code (Max.32 digits, 16 characters) See APPENDIX B: CHARACTER CODE TABLE
CM12	Assign the Service Restriction Class A to the required stations.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A

A

A

	DESCRIPTION	DATA
CM15	Allow Calling Name Display-PS in the Service Restriction Class A assigned by CM12 YY=02.	• YYY=123 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 0: Allow
	Provide Calling Name Display for trunk incoming calls in the Service Restriction Class A assigned by CM12 YY=02.	• YYY=136 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Calling Name Display
CM90	Provide the D^{term} with a select key of Calling Number Display or Calling Name Display, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F1099: Select Key of Calling Number Display or Calling Name Display
	Provide the ATTCON/DESKCON with a select key of Calling Number Display or Calling Name Display, if required.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ +Key No. (2) F6122: Select Key of Calling Number Display or Calling Name Display
	Provide the D^{term} with a Caller ID Display key for displaying the Caller ID, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F5010: Caller ID Display

END

DIRECT INWARD SYSTEM ACCESS (DISA)

Programming

There are two kinds of processor for DISA Code. One is MP card, the other is AP01 card.
For MP card, EXPMEM card can be used to expand the number of codes.

(1) With MP card:

START	DESCRIPTION	DATA
CM08	Designate the processor for checking the ID code on DISA as MP card.	(1) 217 (2) 0: MP
	Assign the ring cadence on a DISA.	(1) 180 (2) 0: 0.4 sec. ON, 0.2 sec. OFF, 0.4 sec. ON, 2 sec. OFF 1◀: As per CM35 YY=33
CM30	Assign the data for DISA to the required trunks.	• YY=02 Terminating System in Day Mode • YY=03 Terminating System in Night Mode • YY=40 Terminating System in Mode A • YY=41 Terminating System in Mode B (1) 000-255: Trunk No. (2) 16: DISA • YY=30 Handling of DISA destination in Day Mode • YY=31 Handling of busy/not available DISA destination in Night Mode (1) 000-255: Trunk No. (2) 00: C.O. line release 01: Forwarded to TAS indicator 03: Forwarded to Attendant Console 04: Forwarded to DIT station assigned by CM30 YY=04, 05 06: DT connection for redial 08: C.O. line release 15◀: C.O. line release
A		

A

	DESCRIPTION	DATA
CM76	When providing DISA to the DID calls, assign the data for converting the received digits to DISA. See DID DIGIT CONVERSION of Page 225-1.	• YY=01 Day Mode • YY=02 Night Mode • YY=03 Mode A • YY=04 Mode B (1) 000-999: Number Conversion Block No. assigned by CM76 YY=00/90 (2) D16: DISA
CM2A	Assign the ID Code Development number for DISA.	• YY=A0 (1) 2 (2) 0-9: ID Code Development No. 00-09 **Note:** *CM2A YY=00-09 is determined by this data.*
	Assign the ID Code for DISA.	• YY=00-09 ID Code Development No. 00-09 (1) X-XX...XX (Max. 16 digits): ID Code for DISA (2) 0000-2999: ID Code Pattern No.
	Assign the desired Trunk Restriction Class for each ID Code Pattern number.	• YY=11 (1) 0000-2999: ID Code Pattern No. (2) 1◀: Unrestricted (RCA) 2: Non-Restricted-1 (RCB) 3: Non-Restricted-2 (RCC) 4: Semi-Restricted-1 (RCD) 5: Semi-Restricted-2 (RCE) 6: Restricted-1 (RCF) 7: Restricted-2 (RCG) 8: Fully-Restricted (RCH)
	Assign the desired Service Restriction Class A to each ID Code Pattern number. The features available in each class are assigned by CM15.	• YY=12 (1) 0000-2999: ID Code Pattern No. (2) 00-15◀: Service Restriction Class A
	Assign the desired Service Restriction Class B to each ID Code Pattern number. The features available in each class are assigned by CM15.	• YY=13 (1) 0000-2999: ID Code Pattern No. (2) 00-15◀: Service Restriction Class B

B

	DESCRIPTION	DATA
B		
CM2A	Assign the desired Service Restriction Class C to each ID Code. The features available in each class are assigned by CM15.	• YY=14 (1) 0000-2999 : ID Code Pattern No. (2) 00-15◀ : Service Restriction Class C
	Assign the purpose of ID Code.	• YY=10 (1) 0000-2999 : ID Code Pattern No. (2) 0 : Validate the ID Code entered from stations and trunks 2 : Validate the ID Code entered from trunks 3◀ : Invalidate the ID Code entered from stations and trunks
CM42	Specify the maximum number of digits for DISA.	(1) 13 (2) 01-16 : 1 digit - 16 digits NONE◀ : 16 digits
END		

Note: *The following number of DISA codes including Authorization Codes and Forced Account Codes can be defined.*
MP without EXPMEM card: Approximately 1000 codes
MP with EXPMEM card: Approximately 3000 codes
The number of the codes varies with the number of digits assigned to each code. For details, refer to the Business/Hotel/Data Features and Specifications.

(2) With AP01 card

START	DESCRIPTION	DATA
CM05	Assign the AP number to the AP01 card. **Note:** *The AP number must match the SENSE switch setting on the AP01 card.* **INITIAL**	• Y=0 (1) 04-15: AP No. (2) 07
CM08	Designate the processor checking the ID code for DISA as AP01 card.	(1) 217 (2) 1◀ : AP01 card
	Assign the ring cadence on a DISA.	(1) 180 (2) 0 : 0.4 sec. ON, 0.2 sec. OFF, 0.4 sec. ON, 2 sec. OFF 1◀ : As per CM35 YY=33
CM30	Assign the data for DISA to the required trunks.	• YY=02 Terminating System in Day Mode • YY=03 Terminating System in Night Mode • YY=40 Terminating System in Mode A • YY=41 Terminating System in Mode B (1) 000-255: Trunk No. (2) 16: DISA
		• YY=30 Handling of busy/not available DISA destination in Day Mode • YY=31 Handling of busy/not available DISA destination in Night Mode (1) 000-255: Trunk No. (2) 00 : C.O. line release 01 : Forwarded to TAS indicator 03 : Forwarded to Attendant Console 04 : Forwarded to DIT station assigned by CM30 YY=04, 05 06 : DT connection for redial 08 : C.O. line release 15◀: C.O. line release
A		

A	DESCRIPTION	DATA
CM76	When providing DISA to the DID calls, assign the data for converting the received digit(s) to DISA. See DID DIGIT CONVERSION on Page 225-1.	• YY=01 Day Mode • YY=02 Night Mode • YY=03 Mode A • YY=04 Mode B (1) 000-999: Number Conversion Block No. assigned by CM76 YY=00/90 (2) D16: DISA
CM42	Specify the maximum number of digits for DISA.	(1) 13 (2) 01-10: 1 digit-10 digits NONE◀ : 10 digits If Check Code is provided, the maximum number of digits is limited to eight.
CMD5	Set the ID Code and its temporary Service Class used for DISA. For details of the programming, refer to AUTHORIZATION CODE (with AP01 card).	• Y=0 • Y=1 • Y=3 • Y=A
END		

Note 1: *Approximately 1,000 Direct Inward System Access (DISA) codes including Authorization Codes and Forced Account Codes can be defined. The number of codes varies with the number of digits assigned to each code.*
Refer to the NEAX2000 IVS^2 *Business/Hotel/Data Features And Specifications.*

Note 2: *To delete all ID codes stored in the AP01 card at one time, perform the following operation:*

$\boxed{\text{ST}}$ + D60 + $\boxed{\text{DE}}$ + 0000 + $\boxed{\text{DE}}$ + CCC + $\boxed{\text{EXE}}$

To access the Digital Announcement Trunk (DAT card) via DISA, add the following programming.

START

	DESCRIPTION	DATA
CM10	Assign a Digital Announcement Trunk card number to the required LEN. **Note:** *The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.*	(1) 000-763 : LEN (2) EB002-EB127 : Digital Announcement Trunk Card No. For PIM 0/1 : EB002-EB031 For PIM 2/3 : EB032-EB063 For PIM 4/5 : EB064-EB095 For PIM 6/7 : EB096-EB127 **Note:** *EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.*
CM2A	Assign the Service Restriction Class A for Digital Announcement Trunk access to the required ID Code Pattern number.	• YY=12 0000-2999 : ID Code Pattern No. assigned by CM2A YY=00-09 00-15◀ : Service Restriction Class A
CM15	Allow Digital Announcement Trunk access in the Service Restriction Class A assigned by CM2A YY=12.	• YY=33 (1) 00-15 : Service Restriction Class A assigned by CM2A YY=12 (2) 1◀ : Allow
CMD5	Assign the Service Restriction Class A for Digital Announcement Trunk access to the required ID Code, when providing DISA with an Application Processor (AP01).	• Y=3 (1) X-X...X : ID Code (Max. Number of digits specified by CM42>13) (2) 201 XX 0000 XX : 00-15 ◀:Service Restriction Class A
CM15	Allow Digital Announcement Trunk access in the Service Restriction Class A assigned by CMD5 Y=3.	• YY=33 (1) 00-15 : Service Restriction Class A assigned by CMD5 Y=3 (2) 1◀ : Allow
CM20	To record and replay a message from an outside user, assign the Digital Announcement Trunk access code, respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX : Access Code (2) A100 : Record A101 : Replay

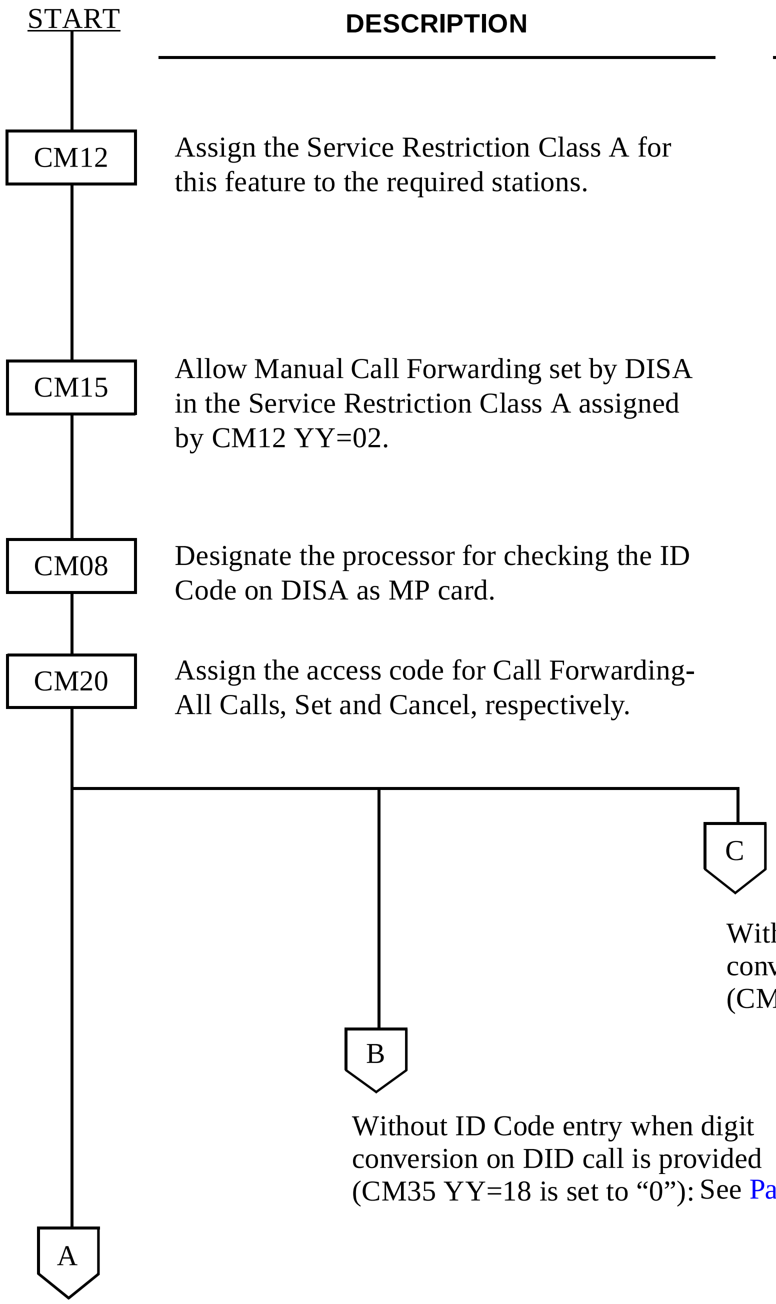
END

Call Forwarding Set By DISA

(Series 2100 software required)

Programming

In addition to the DISA programming, do the following programming.

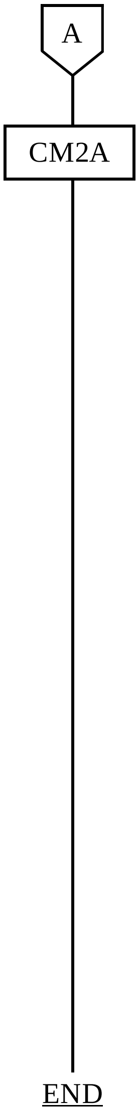


START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A for this feature to the required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Manual Call Forwarding set by DISA in the Service Restriction Class A assigned by CM12 YY=02.	• YYY=134 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 0: Allow
CM08	Designate the processor for checking the ID Code on DISA as MP card.	(1) 217 (2) 0: MP
CM20	Assign the access code for Call Forwarding-All Calls, Set and Cancel, respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (*5, #5) (2) A010: Call Forwarding-All Calls Set A011: Call Forwarding-All Calls Cancel

C: Without ID Code entry when digit conversion on DID call is not provided (CM35 YY=18 is set to “1”): See Page 237.

B: Without ID Code entry when digit conversion on DID call is provided (CM35 YY=18 is set to “0”): See Page 236.

A: With ID Code entry: See Page 235.



DESCRIPTION	DATA
Assign the ID Code Development number for DISA.	• YY=A0 (1) 2: DISA Code (2) 0-9: ID Code Development No. 00-09
Assign the ID Code for DISA.	• YY=00-09 ID Code Development No. 00-09 (1) X-XX...XX (Max. 16 digits): ID Code for DISA (2) 0000-2999: ID Code Pattern No.
Assign the purpose of ID Code.	• YY=10 (1) 0000-2999: ID Code Pattern No. (2) 2: Validate the ID Code entered from trunks
Assign the Service Restriction Class A assigned by CM15 YYY=134 to the ID Code Pattern number.	• YY=12 (1) 0000-2999: ID Code Pattern No. (2) 00-15◀: Service Restriction Class A
Specify the setting station of Manual Call Forwarding set by DISA, if required. If the station number is set by this command, Call Forward setting is not available for the other stations.	• YY=16 (1) 0000-2999: ID Code Pattern No. (2) X-XXXXXXXX: Station No. NONE◀: All stations

To abbreviate the ID Code entry when digit conversion on DID call is provided (CM35 YY=18 is set to “0”):

B

	DESCRIPTION	DATA
CM35	Set the trunk route to use the calling party number as the ID Code for DISA.	• YYY=155 (1) 00-63: Trunk Route No. (2) 0: Available
CM2A	Assign the ID Code Development number, for Call Forwarding set by DISA.	• YY=A0 (1) 3: Automatic service setting by DISA (2) 0-9: ID Code Development No. 00-09
	Assign the calling party number as the ID Code for DISA.	• YY=00-09 ID Code Development No. 00-09 (1) X-XX...XX (Max. 16 digits): Calling Party No. (2) 0000-2999: ID Code Pattern No.
	Assign the purpose of ID Code.	• YY=10 (1) 0000-2999: ID Code Pattern No. (2) 2: Validate the ID Code entered from trunks
	Assign the Service Restriction Class A assigned by CM15 YYY=134 to the ID Code Pattern number.	• YY=12 (1) 0000-2999: ID Code Pattern No. (2) 00-15◀: Service Restriction Class A
	Set the calling party number to be used as the ID Code for DISA.	• YY=15 (1) 0000-2999: ID Code Pattern No. (2) 0: Available
	Specify the setting station of Manual Call Forwarding set by DISA, if required. If the station number is set by this command, Call Forward setting is not available for the other stations.	• YY=16 (1) 0000-2999: ID Code Pattern No. (2) X-XXXXXXXX: Station No. NONE◀: All stations

END

To abbreviate the ID Code entry when digit conversion on DID call is not provided (CM35 YY=18 is set to “1”):

	DESCRIPTION	DATA
C		
CM76	Assign the Number Conversion Block number to the DID number. **Note:** *When the Expansion Memory card (PZ-M537) is not mounted on the MP card, the 2nd data is 000-499.*	• YY=00 (1) X-XXXX: DID No. (2) 000-999: Number Conversion Block No. 000-999 **Note**
	Specify the terminating system as DISA.	• YY=01 Day Mode • YY=02 Night Mode • YY=03 Mode A • YY=04 Mode B (1) 000-999: Number Conversion Block No. assigned by CM76 YY=00 (2) D16: DISA
	Set the calling party number to be used as the ID Code for DISA when the DID number assigned by CM76 YY=00 is sent.	• YY=14 (1) 000-999: Number Conversion Block No. assigned by CM76 YY=00 (2) 0: Available
	Allow the service setting by DISA without dialing the ID Code.	• YY=15 (1) 000-999: Number Conversion Block No. assigned by CM76 YY=00 (2) 15◀: Service setting without dialing the ID Code
CM2A	Assign the ID Code Development number, for Call Forwarding set by DISA.	• YY=A0 (1) 3: Automatic service setting by DISA (2) 0-9: ID Code Development No. 00-09
	Assign the calling party number as the ID Code for DISA.	• YY=00-09 ID Code Development No. 00-09 (1) X-XX...XX (Max. 16 digits): Calling Party No. (2) 0000-2999: ID Code Pattern No.
D		

D	DESCRIPTION	DATA
CM2A	Assign the purpose of ID Code.	• YY=10 (1) 0000-2999 : ID Code Pattern No. (2) 2 : Validate the ID Code entered from trunks
	Assign the Service Restriction Class A assigned by CM15 YYY=134 to the ID Code Pattern number.	• YY=12 (1) 0000-2999: ID Code Pattern No. (2) 00-15◀: Service Restriction Class A
	Set the calling party number to be used as the ID Code for DISA.	• YY=15 (1) 0000-2999: ID Code Pattern No. (2) 0: Available
	Specify the setting station of Manual Call Forwarding set by DISA, if required. If the station number is set by this command, Call Forward setting is not available for the other stations.	• YY=16 (1) 0000-2999: ID Code Pattern No. (2) X-XXXXXXXX: Station No. NONE◀: All stations
END		

Hardware Required

AP01 card, or EXPMEM card on MP if required

DAT card if required

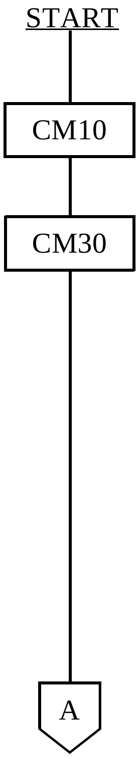
DIRECT INWARD TERMINATION (DIT)

Programming

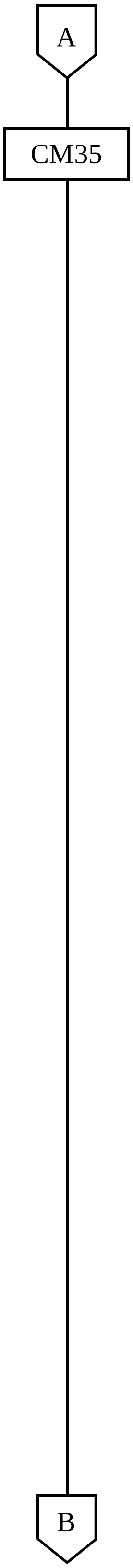
START	DESCRIPTION	DATA
CM30	Assign the data for terminating system in Day Mode/Night Mode/Mode A/Mode B, to each Loop/Ground Start trunk, respectively.	• YY=02 Day Mode • YY=03 Night Mode • YY=40 Mode A • YY=41 Mode B (1) 000-255: Trunk No. (2) 04: Direct-In Termination
	Assign the station number to be terminated by DIT in Day Mode/Night Mode/Mode A/Mode B respectively.	• YY=04 Day Mode • YY=05 Night Mode • YY=42 Mode A • YY=43 Mode B (1) 000-255: Trunk No. (2) X-XXXXXXXX: Station No.
	Assign the destination to be rerouted when the DIT station is busy/not available in Day Mode and Night Mode respectively.	• YY=13 Day Mode • YY=14 Night Mode (1) 000-255: Trunk No. (2) 01 : TAS BUZZER 04 : Attendant Console 06 : Automatic Camp-On 15◀ : Waiting until the DIT station becomes idle
	Assign the transfer destination for an unanswered DIT call in Day Mode and Night Mode, respectively.	• YY=15 Day Mode • YY=16 Night Mode (1) 000-255: Trunk No. (2) 01 : Attendant Console 03 : TAS 15◀ : To be continued DIT
CM41	Specify the timing for an unanswered call to a DIT destination.	• Y=0 (1) 01 (2) 01-30: 4-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.
CM08	Assign the ring cadence on a DIT call.	(1) 179 (2) 0 : As per CM35 YY=33 1◀ : 0.4 sec. ON, 0.2 sec. OFF, 0.4 sec. ON, 2 sec. OFF
END		

DIRECT OUTWARD DIALING (DOD)

Programming



DESCRIPTION	DATA
Assign the trunk numbers to the required LEN.	(1) 000-763 : LEN (2) D000-D255 : Trunk No.
Assign the data for Direct Outward Dialing to the trunk number assigned by CM10. **Note:** *For Resident System Program, refer to the Command Manual.*	• YY=00 Trunk Route allocation (1) 000-255 : Trunk No. (2) 00-63 : Trunk Route No. **Note** • YY=01 Tenant Allocation (1) 000-255 : Trunk No. (2) 00-63 : Tenant No. 01◀ : Tenant No. • YY=08 Restriction on Night Mode (1) 000-255 : Trunk No. (2) 0 : Restricted 1◀ : Allow



DESCRIPTION

Assign the data for Direct Outward Dialing to the Route number assigned by CM30 YY=00.

Note: *For Resident System Program, refer to the Command Manual.*

DATA

- YY=00 Kind of Route

(1) 00-63 : Trunk Route No.
(2) 00 : DDD
01 : FX
02 : WATS
03 : CCSA

- YY=01 Type of Signal

(1) 00-63 : Trunk Route No.
(2) 2 : DP
4 : DTMF
7◀ : DTMF

- YY=02 OG/IC

(1) 00-63 : Trunk Route No.
(2) 2 : Outgoing
3◀ : Bothway

- YY=04 Answer Signal Condition

(1) 00-63 : Trunk Route No.
(2) 1 : Answer Signal by Polarity Reversal
7◀ : No Answer Signal

In case of no Answer Signal, system recognizes the answer in timing set by CM41 Y=0>03.

- YY=05 Release Signal Condition

(1) 00-63 : Trunk Route No.
(2) 0 : No Release Signal from C.O.
1◀ : Release Signal from C.O.

- YY=08 Dial Pulse Sending

(1) 00-63 : Trunk Route No.
(2) 3◀ : To be sent

- YY=09 Incoming Connection Signalling

(1) 00-63 : Trunk Route No.
(2) 01 : Ring Down (Ground Start)
15◀ : Ring Down (Loop Start)

	DESCRIPTION	DATA
B		
CM35	According to the characteristics of each C.O. line, assign the data for DP/DTMF Sender to each route. For the details of the command, refer to the Command Manual. **Note:** *For Resident System Program, refer to the Command Manual.*	• YY=20 Sender start condition • YY=21 Sender Prepause Timing • YY=23 DP-Inter Digital Pause • YY=24 DTMF-Inter Digital Pause • YY=25 DP-Make Ratio • YY=26 DTMF Signal Width • YY=45 DP Sender Release Timing • YY=46 DTMF Sender Release Timing
CM41	Specify the timing for Inter-digit Pause on outgoing C.O. call.	• Y=0 (1) 27 (2) 03-14: 3-14 sec. in 1 sec. increments If no data is set, the default setting is 7 seconds.
CM20	Assign the access code to each route.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) 100-163: Trunk Route No. 00-63
CM90	Assign the trunk appearance line key on a D^{term}, if provided.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) D000-D255: Trunk No.
END		

Note: *For the Trunk Restriction Class, refer to CLASS OF SERVICE on Page 149.*

DIRECT STATION SELECTION/BUSY LAMP FIELD (DSS/BLF) CONSOLE

Programming

START

	DESCRIPTION	DATA
CM10	Assign the DSS Console number to its associated LEN.	(1) 000-763: LEN (2) DSS Console No. E100-E107: For PIM 0/1 E108-E115: For PIM 2/3 E116-E123: For PIM 4/5 E124-E131: For PIM 6/7
CM96	Assign a single-line station, D^{term}, or ATTCON/DESKCON to work in conjunction with the DSS Console.	(1) 00-31 : DSS Console No. (Last two digits of E100-E131 assigned by CM10) (2) X-XXXXXXXX : Station No./My Line No. of D^{term} E000-E007 : ATTCON/ DESKCON
CM97	Assign the station and trunk numbers, as needed, to the keys on each DSS Console.	(1) DSS Console No. (00-31) + , + DSS Key No. (00-59) (2) X-XXXXXXXX: Station No. D000-D255: Trunk No.
	Assign a Do Not Disturb and Message waiting function key, if needed, on each DSS Console.	(1) DSS Console No. (00-31) + , + DSS Key No. (57-59) (2) F1049: Message Waiting Set/Reset F1053: Do Not Disturb Set/Reset
	When providing Do Not Disturb or Message Waiting function key, assign a changing Function key on each DSS Console.	(1) DSS Console No. (00-31) + , + DSS Key No. (56) (2) F1052: Function Change
CM08	Specify the type of busy indication on the BLF of the DSS console as station base or extension base.	(1) 269 (2) 0 : Station base 1◀ : Extension base

END

Hardware Required

DSS Console

DLC card

DISTINCTIVE RINGING

Programming

(1) For Station to Station calls

	DESCRIPTION	DATA
START		
CM08	Specify the interval of ringing tones.	(1) 138 : For Internal call (2) 0 : 2 sec. ON-4 sec. OFF 1◀ : 1 sec. ON-2 sec. OFF
END		

(2) For C.O./Tie line calls (except for Direct-in Termination/Direct Inward Dialing/DISA/CCIS calls)

	DESCRIPTION	DATA
START		
CM35	Specify the interval of ringing tones. **Note:** *For incoming calls to a Trunk-Direct Appearances key on D^{term}s, the special ringing; 0.2 sec. ON-0.2 sec. OFF will be applied.*	• YY=33 (1) 00-63: Trunk Route No. (2) 0 : 0.4 sec. ON-0.2 sec. OFF-0.4 sec. ON-2 sec. OFF 1 : 0.4 sec. ON-0.2 sec. OFF-0.4 sec. ON-2 sec. OFF 2 : 1 sec. ON-2 sec. OFF 3◀ : 2 sec. ON-4 sec. OFF
END		

(3) For Direct-in Termination calls

	DESCRIPTION	DATA
START		
CM08	Specify the interval of ringing tones.	(1) 179 : For DIT call (2) 0 : As per CM35 YY=33 1◀ : 0.4 sec. ON-0.2 sec. OFF-0.4 sec. ON-2 sec. OFF
END		

(4) For Direct Inward Dialing calls

- To distinguish by the trunk route

	DESCRIPTION	DATA
START		
CM08	Specify the interval of ringing tones.	(1) 180: For DID call (2) 0: 0.4 sec. ON-0.2 sec. OFF-0.4 sec. ON-2 sec. OFF 1◀: As per CM35 YY=33
END		

- To distinguish by the terminating DID number

	DESCRIPTION	DATA
START		
CM08	Assign the interval of ringing tones as “As per CM76 YY=22”.	(1) 180: For DID call (2) 1◀: As per CM76 YY=22
CM76	Specify the interval of ringing tones on DID calls. For this assignment, do not set CM76 YY=22 to 3 [As per CM35 YY=33 (D^{term} or SLT)]. **[Series 2200 (R3.1) software required]**	• YY=22 (1) 000-999: Number Conversion Block No. assigned by CM76 YY=00/90 (2) 0: 0.5 sec. ON-0.5 sec. OFF (D^{term}) 1.0 sec. ON-2.0 sec. OFF (SLT) 1: 0.5 sec. ON-0.5 sec. OFF-0.5 sec. ON-1.5 sec. OFF (D^{term}) 0.4 sec. ON-0.2 sec. OFF-0.4 sec. ON-2.0 sec. OFF (SLT) 2: 1.0 sec. ON-2.0 sec. OFF (D^{term} or SLT)
END		

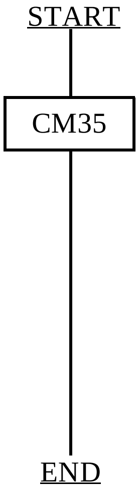
(5) For DISA/Automated Attendant calls

	DESCRIPTION	DATA
START CM08 END	Specify the interval of ringing tones.	(1) 180 : DISA and Automated Attendant call (2) 0 : 0.4 sec. ON-0.2 sec. OFF-0.4 sec. ON-2 sec. OFF 1◀ : As per CM35 YY=33

(6) For C.O. calls transferred to another station from a station/Attendant Console

	DESCRIPTION	DATA
START CM08 END	Select the kind of the ringing for station/attendant calls with trunk lines placed on Consultation Hold.	(1) 137 : For Consultation Hold call (2) 0 : Change from Internal Ringing (CM08>138) to External Ringing (CM35 YY=33) when caller goes on-hook or presses RLS key 1◀ : External Ringing (CM35 YY=33)

To provide a distinctive lamp indication for D$^{\text{term}}$s during a call termination, do the following programming:



DESCRIPTION	DATA
Specify the lamp color for an incoming external call. **Note:** *The lamp color for incoming internal calls is red (120 IPM flashing). For indicating the termination of a transferred external incoming call, the flashing lamp color depends on CM08>137.*	• YY=32 (1) 00-63 : Trunk Route No. (2) 0 : Green (120 IPM) 1◀ : Red (120 IPM)

To provide the distinctive ringing patterns to D^{term}s in behind PBX, in order to distinguish between an internal call from the main PBX and an external incoming call:

START	DESCRIPTION	DATA
CM08	Specify the interval of ringing tones.	(1) 138 : For Internal call (2) 0 : 2s ON-4s OFF 1◀ : 1s ON-2s OFF
	Specify the interval of ringing tones until detecting a ringing frequency from the main PBX (Centrex). Ringing is sent from D^{term} until detection of the ringing frequency.	(1) 380 (2) 0 : As per CM08>381 1◀ : As per CM35 YY=33
		(1) 381 (2) 0 : No Ringer 1◀ : Ringing Tone (0.5 sec.) is sent once
	Specify the lamp indication of D^{term} until detecting the kind of incoming call from the main PBX (Centrex). The lamp is lit until detection of the ringing frequency.	(1) 382 (2) 0 : Red Steady Light 1◀ : 120 IPM Flash (As per CM35 YY=32)
	Specify the ringing distinction by detecting the ringing signal from the main PBX (Centrex).	(1) 366 (2) 0 : Longer Ringing than CM41Y=2>40: External call Shorter Ringing than CM41 Y=2>40: Internal call 1◀ : Longer Ringing than CM41 Y=2>40: Internal call Shorter Ringing than CM41 Y=2>40: External call

Note 1: *When the ringer is for an internal call, interval of ringing signal:*
CM08>138
D^{term} lamp color: Change to red
D^{term} tone ringer: CM35 YY=34, 164

Note 2: *When the ringer is for an external call, interval of ringing signal:*
CM35 YY=33
D^{term} lamp color: CM35 YY=32
D^{term} tone ringer: CM35 YY=34, 164

A

A

DESCRIPTION | **DATA**

CM35

Specify the lamp color for an incoming external call.

Note 1: *The lamp color for incoming internal calls is red (120 IPM flashing).*

Note 2: *For indicating the termination of a transferred external incoming call, the flashing lamp color depends on CM08>137.*

- YY=32

(1) 00-63 : Trunk Route No.
(2) 0 : Green (120 IPM)
1◀ : Red (120 IPM)

Specify the interval of ringing tones to a D^{term} on an incoming call.

Note: *For incoming calls to Trunk Line Appearance Key on D^{term}, the special ringing; 0.2 sec. ON-0.2 sec. OFF will be applied.*

- YY=33

(1) 00-63: Trunk Route No.
(2) 0 : 0.4 sec. ON-0.2 sec. OFF-0.4 sec. ON-2 sec. OFF
1 : 0.4 sec. ON-0.2 sec. OFF-0.4 sec. ON-2 sec. OFF
2 : 1 sec. ON-2 sec. OFF
3◀ : 2s ON-4s OFF

Specify D^{term} tone ringer on an incoming call.
(Series 2200 R3.1 software required)

- YY=34, 164

(1) 00-63: Trunk Route No.
(2) See the table below.

YY=34	YYY=164: 0	YYY=164: 1◀
0	1024 [Hz]	1024 + 1285 [Hz]/16 [Hz] Modulating Signal
1	1024 +1285 [Hz]	480 + 606 [Hz]/8 [Hz] Modulating Signal
2	1200 [Hz]	600 + 700 [Hz]/16 [Hz] Modulating Signal
3◀	500 [Hz]	480 + 606 [Hz]/16 [Hz] Modulating Signal

B

	DESCRIPTION	DATA
B		
CM35	Provide the distinctive ringing patterns to a D^{term} in behind PBX.	• YY=87 (1) 00-63 : Trunk Route No. (2) 0 : To provide 1◀ : Not provided
CM30	Specify the terminating system for incoming C.O. calls.	• YY=02 in Day Mode • YY=03 in Night Mode • YY=40 in Mode A • YY=41 in Mode B (1) 000-255: Trunk No. (2) 02: Trunk-Direct Appearances 03: Trunk-Direct Appearances + TAS
	Provide the Trunk-Direct Appearances on D^{term}.	• YY=18 (1) 000-255: Trunk No. (2) 0 : To provide 1◀ : Not provided
CM41	Assign the ringing detect timer for incoming trunk calls.	• Y=2 (1) 00 (2) 06-10: 192 ms.-320 ms. (32 ms. increments) If no data is set, the default setting is 256-288 ms.
	Assign the main PBX (Centrex) ringing distinction timer. **Note 1** (on next page)	• Y=2 (1) 40 (2) 01-15: 128 ms.-1920 ms. (128 ms. increments) If no data is set, the default setting is 1280-1408 ms.
	Assign the immediate ringing guard timer from the main PBX (Centrex). **Note 1, Note 2** (on next page)	• Y=2 (1) 41 (2) 00-90: 0 ms.-12672 ms. (128 ms. increments) If no data is set, the default setting is 384-512 ms.
C		

C

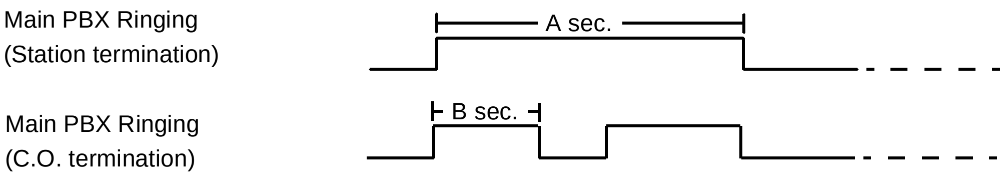
DESCRIPTION **DATA**

CM41

Note 1: *When immediate ringing is sent from the main PBX (Centrex), CM41 Y=2>40 plus CM41 Y=2>41 must be assigned as longer time than the time assigned by CM41 Y=2>00.*

When immediate ringing is not sent from the main PBX (Centrex), CM41 Y=2>40 must be assigned as longer time than the time assigned by CM41 Y=2>00.

Check the main PBX (Centrex) ringer cycle and set as shown below:



B sec. < CM41 Y=2>40 setting time < A sec.

When the gap between the main PBX station terminating ringer and C.O. line terminating ringer is under 200 ms., distinction may be incomplete.

Note 2: *When Immediate Ringing is not provided on main PBX, be sure to set CM41 Y=2>41 as 00.*

CM90

Assign the Trunk Line Appearance key to a D^{term}.

- YY=00

(1) My Line No. + $\boxed{,}$ + Key No.
(2) D000-D255: Trunk No.

Provide the tone ringer on call termination.

Note: *When CM30 YY=02/03/40/41 2nd data is 03, this setting is required.*

- YY=01

(1) My Line No. + $\boxed{,}$ + Key No.
(2) 0 : Disabled
1◀ : Enabled

END

DO NOT DISTURB

Programming

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A to the required stations.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Do Not Disturb in the Service Restriction Class A assigned by CM12 YY=02.	• YY=19 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 1◀ :Allow
CM13	Assign the group of stations in Do Not Disturb. Do Not Disturb is set to these stations (assigned by this command) simultaneously by operation from an Attendant Console.	• YY=00 (1) X-XXXXXXXX: Station No. (2) 0: To provide
CM20	Assign the access code for Do Not Disturb Set/Cancel.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (*8, #8) (2) A022: Do Not Disturb Set A023: Do Not Disturb Cancel
CM51	Assign the destination of the call when called station is set to Do Not Disturb.	• YY=10 (1) 00-63: Tenant No. (2) X-XXXXXXXX: Station No. E000: Attendant Console
CM90	Assign a Do Not Disturb function key to a D^{term}, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0022: Do Not Disturb Set/Reset
	Assign Do Not Disturb and Do Not Disturb Override function keys to the ATTCON/ DESKCON. **Note:** *By Resident System Program, a Do Not Disturb key is assigned as a Multi-function key, on the ATTCON/ DESKCON.*	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6102: Do Not Disturb F6103: Do Not Disturb Override F6104: Reset
A		

A

	DESCRIPTION	DATA
CM08	Specify Call Forwarding-Busy Line/Station Hunting for a station set for Do Not Disturb.	(1) 240 (2) 0 : Available 1◀ : Not available
	For a system using multiple tenants, specify the destination of a call transferred in CM51 YY=10.	(1) 241 (2) 0 : Tenant of called station 1◀ : Tenant of calling station
CM48	Select the Dial Tone on setting Do Not Disturb. INITIAL	• Y=2 (1) 14 : Dial Tone on setting Do Not Disturb (2) 0 : Special Dial Tone (Stutter Dial Tone) 1◀ : Dial Tone

END

To set an outside party as a destination of transferred call

[Series 2200 (R3.1) software required]

START	DESCRIPTION	DATA
CM11	Assign the Virtual Line station number to the required LEN.	(1) 000-255: Virtual LEN (2) X-XXXXXXXX: Virtual Line Station No.
CM12	Assign Service Restriction Class A to each station.	• YY=02 (1) X-XXXXXXXX: Virtual Line Station No. assigned by CM11 (2) XXZZ XX: 00-15◀: Service Restriction Class A
CM15	Assign Call Forwarding-All Calls-Outside to Service Restriction Class A assigned by CM12 YY=02.	• YY=26 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀: Allow
CME6	Assign Call Forwarding-All Calls-Outside to the Virtual Line station number assigned by CM11.	• YY=00 Call Forwarding-All Calls (1) X-XXXXXXXX: Virtual Line Station No. assigned by CM11 (2) Destination No.: X-XX + $\boxed{,}$ + YY···Y X-XX: Outgoing Trunk/LCR Group Access Code (1-2 digits) $\boxed{,}$: Separate Mark YY···Y: Called No. (Max.26 digits)
CM08	For system with multiple-tenant, specify the tenant of calling station as the destination of a call transferred in CM51 YY=10.	(1) 241 (2) 1◀: Tenant of calling station
CM51	Assign the destination of the call when called station is set to Do Not Disturb as Virtual Line station assigned by CM11.	• YY=10 (1) 00-63: Tenant No. (2) X-XXXXXXXX: Virtual Line Station No. assigned by CM11
END		

ENHANCED 911

Programming

START	DESCRIPTION	DATA
CM05	Assign an AP number to the 911 Sender trunk. INITIAL The AP number is given by the SENSE switch on the 911 Sender trunk.	• Y=0 (1) 04-15, 20-31: AP No. (2) 08: 911 Sender Trunk (4RSTB card)
CM06	Assign 911 Sender trunk number to each 911 Sender trunk. INITIAL	• YY=04 (1) 00-15 : 911 Sender Trunk No. (2) XX Z XX : 04-15, 20-31: AP No. assigned by CM05 Z : 0-3: Circuit No.
CM08	Send ANI signal to the network on Enhanced 911.	(1) 474 : Enhanced 911 (2) 0 : To send
	Specify whether the Sender Tone will be sent when a call originated, or not.	(1) 475 : Sending of Sender Tone (2) 0 : Not sent (No tone) 1◀ : To send
CM09	Provide the System with Enhanced 911. INITIAL	(1) 52 : Enhanced 911 (2) 0◀ : To provide
CM31	Specify that all circuits on the 911 Sender trunk are used as sender. INITIAL **Note:** *The AP number 0-3 corresponds to the AP numbers assigned by CM05 (04-15, 20-31) as shown below:* *CM31 Y=2* — *CM05 Y=0* *AP Number 0:* — *AP Number X* *AP Number 1:* — *AP Number Y* *AP Number 2:* — *AP Number Z* *AP Number 3:* — *AP Number W* *(X<Y<Z<W)*	• Y=2 (1) 0-3 : AP No. **Note** (2) 0 : All circuits are used as the 911 Sender
CMAA	Specify the sending method of calling number to the 911 Sender trunk.	• YY=07 Sending method of calling number (1) 04-15, 20-31: AP No. assigned by CM05 (2) 3: Enhanced 911
A		

A

	DESCRIPTION	DATA
CM35	Set the trunk route that no answer signal arrives from the distant office for outgoing connection.	• YY=04 Answer Signal from distant office (1) 00-63 : Trunk Route No. (2) 3 : No Answer signal (Polarity Reversal is ignored)
	Specify incoming connection signaling. **Note:** *DTI card must be set to Wink Start. ODT card and COT card must be set to Ring Down. Enhanced 911 will not function if ODT card is set to Wink Start.*	• YY=09 Incoming connection signaling (1) 00-63 : Trunk Route No. (2) 03 : Wink Start 15◀ : Ring Down
	Provide SMDR/Centralized Billing for outgoing call.	• YY=14 SMDR for outgoing call (1) 00-63 : Trunk Route No. (2) 1◀ : To provide
	Specify sender start condition. **Note:** *Digital and Analog Tie Lines are set to Wink Start. Analog Loop Start Lines are set to Timing Start.*	• YY=20 Sender start condition (1) 00-63 : Trunk Route No. (2) 00 : Wink Start 15◀ : Timing Start
	Specify the trunk seizure pattern.	• YY=36 Trunk seizure pattern (1) 00-63 : Trunk Route No. (2) 0 : After dialing maximum number of digits
	Provide the trunk route with Enhanced 911.	• YY=38 Enhanced 911 (1) 00-63 : Trunk Route No. (2) 0 : Available
	Specify the sending method of calling number to the network.	• YYY=129 Sending method of calling number (1) 00-63 : Trunk Route No. (2) 3 : Enhanced 911
	Assign the Area Code Development Pattern number for maximum digit analysis.	• YY=76 Area Code Development Pattern (1) 00-63 : Trunk Route No. (2) 00-07 : Area Code Development Pattern No. 0-7
CM85	Define the maximum number of digits which can be sent to the network.	• Y=0-7 Area Code Development Pattern No. 0-7 (1) X-XXX... : Area Code/Office Code or its part (Max. 8 digits) (2) 01-24◀ : 1-24 digits 25-79 : 25-79 digits

B

B

	DESCRIPTION	**DATA**
CM20	Assign the access code for LCR Group 0-3.	• YY=0-3 Numbering Group No. 0-3 (1) X-XXXX: Access Code (Max. 4 digits) (2) A126-A129: Access Code for LCR Group 0-3
CM8A	Assign the LCR data, as needed.	YYYY (1) See CM8A in the Command Manual (2) See CM8A in the Command Manual
CM12	Assign the calling station number sent to the network. “*”, “#” are not available for the sending number.	• YY=12 Calling Number assignment (1) X-XXXXXXXX: Station No. (2) X-XXXX: Sending No.
	Assign the Local Office Code Table number for sending the calling office code to the network.	• YY=13 Local Office Code Table No. (1) X-XXXXXXXX: Station No. (2) 00-14: Local Office Code Table No. 00-14 15◄: No data
CM35	Assign the Local Office Code Table number used for tandem connection. **Note:** *This command is not used for the NEAX 2000 IVS^2 containing the MF Sender for Enhanced 911. This command is used for an incoming CCIS voice route or incoming Tie Line route. The selected table number must be different from the tables selected by CM12 YY=13. The table selected for the incoming CCIS/Tie route must contain the main telephone number (area code, office code, and last four digits) of the distant PBX.*	• YY=03 Local Office Code Table No. on tandem connection (1) 00-63: Trunk Route No. (2) 00-14: Local Office Code Table No. 00-14 15◄: Not sent
CM50	Assign the Local Office Code sent to the network. “*”, “#” is not available for the sending number.	• YY=05 Local Office Code assignment (1) 00-14: Local Office Code Table No. 00-14 (2) X-XXX...: Sending No. (Max. 12 digits)

C

To provide 911 Notification on ATTCON/DESKCON:

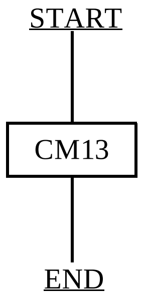
	DESCRIPTION	**DATA**
C		
CM8A	Provide 911 Notification on the ATTCON/ DESKCON.	• YYYY=5000-5255 LCR Pattern No. 000-255 (1) 166 : 911 Notification on ATTCON/ DESKCON (2) 0 : To provide
CM51	Assign the destination ATTCON/DESKCON of 911 Notification. **(Series 2100 software required)** **Note:** *911 Notification can be provided on the maximum two ATTCONs/DESKCONs per system.*	• YY=16 (1) 04 : ATTCON/DESKCON No. 1 for 911 Notification 05 : ATTCON/DESKCON No. 2 for 911 Notification (2) E000-E007: ATTCON/DESKCON No. 0-7
CM30	To display the local office code on the ATTCON/DESKCON for C.O. tandem 911 calls, assign the incoming C.O. trunk to the local office code.	• YY=19 (1) 000-255: Trunk No. (2) XXXX: Trunk ID Code (Local Office Code)
CM90	Assign the 911 Notification key on the ATTCON/DESKCON. **(Series 2100 software required)** **Note:** *Do not assign this data to the Multi-Function keys.*	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6124: 911 Notification
	To allow an attendant to interrupt the 911 call, assign the Busy Verification key on the ATTCON/DESKCON.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6107: Busy Verification
END		

Hardware Required

MFR card (4RSTB)

EXECUTIVE CALLING

Programming



DESCRIPTION	DATA
Assign VIP class to the required station.	• YY=21 (1) X-XXXXXXXX: Station No. (2) 0: To provide

EXECUTIVE OVERRIDE

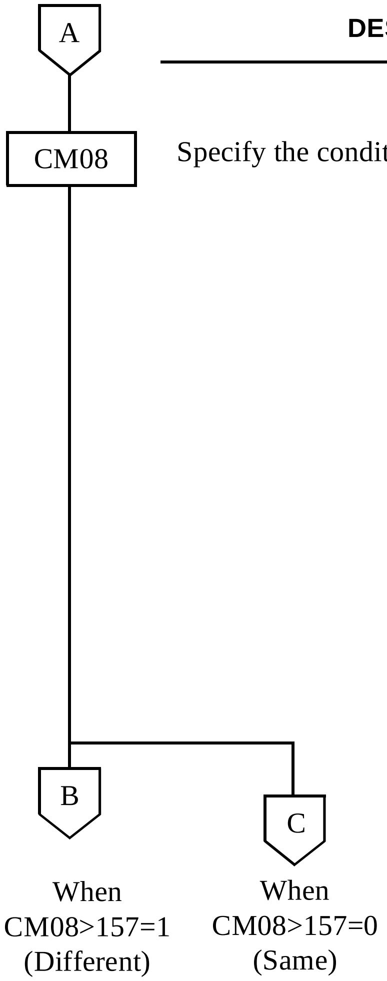
Programming

START	DESCRIPTION	DATA
CM12	Assign Service Restriction Class A to required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZXX: 00-15◀ : Service Restriction Class A
CM15	Allow Executive Override in the Service Restriction Class A assigned by CM12 YY=02. The setting of data for both called side and calling side of Executive Override (CM15 YY=05 and CM15 YY=09) are required.	• YY=05 Calling Side and YY=09 Called Side (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for Executive Override.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (*4) (2) A006: Executive Override
CM45	Make the Conference trunk on the MP card in service.	• Y=6 (1) 00-15: MP built-in CFT Circuit No. (2) 1◀ : In service
CM90	Assign an Executive Override key to the D^{term}, as needed.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0006: Executive Override
CM08	Specify the Waiting Tone sent to connected parties during Executive Override.	(1) 045 (2) 0: Only once 1◀ : Every 4 sec.
END		

EXTERNAL PAGING WITH MEET-ME

Programming

START	DESCRIPTION	DATA
CM10	Assign the Paging Trunk (COT card and DK card) to the required LEN. **Note:** *The DK card number must be assigned to the first LEN (Level 0) and third LEN (Level 2) of each LT slot.*	(1) 000-763 : LEN (2) D000-D255 : COT card E800-E831 : DK card For PIM 0/1 : E800-E807 For PIM 2/3 : E808-E815 For PIM 4/5 : E816-E823 For PIM 6/7 : E824-E831 **Note:** *Circuit No. 3 of E831 is used for built-in External Equipment Interface of MP card by setting CM44.*
CM12	Assign the Service Restriction Class A for Paging Access to the required stations.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15◀ : Service Restriction Class A
CM15	Allow Paging Access in the Service Restriction Class A assigned by CM12 YY=02.	• YY=08 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM44	Assign the paging function to the DK card or external equipment interface on the MP card.	(1) XX Y XX : 00-31: DK Card No. assigned by CM10 (E800-E831) Y : 0-3: Circuit No. of DK card 313 : Built-in External Equipment Interface (2) 02XX : Speaker Paging Start XX : 00-09: Speaker Paging Zone 0-9 assigned by CM30 YY=28
A		



DESCRIPTION

Specify the conditions for Paging access.

DATA

(1) 094 : Paging Access Tone
(2) 0 : To send
1◀ : Not sent

(1) 096 : Hook flash Signal to the Paging Equipment
(2) 0 : To send
1◀ : Not sent

(1) 149 : Automatic Call Back when the paging station is busy through non delay operation
(2) 0 : Available
1◀ : Not available

(1) 157 : Access code for Paging Access and Answer
(2) 0 : Same
1◀ : Different

B	DESCRIPTION	DATA
CM20	Assign the access code for Paging Access and Answer.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (86) (2) 100-163 : For Paging Access (Route 00-63) (07) A070-A079 : For Paging Answer (Zone 0-9) A080 : Paging Cancel (Delay Operation)
CM30	Assign the data for Paging Trunk to the trunk number assigned by CM10.	• YY=00 Trunk Route allocation (1) 000-255: Trunk No. (2) 00-63: Trunk Route No. • YY=28 Zone/Kind of Paging (1) 000-255: Trunk No. (2) X Z X: 0-9:Paging Answer Zone 0-9 Z: Kind of Paging 0: No answer 2: Non-delay answer 4: Non-delay and delay answer
CM35	Assign the Paging trunk to the trunk route number assigned by CM30 YY=00.	• YY=00 (1) 00-63: Trunk Route No. (07) (2) 05 • YY=08 Dial Pulse Sending Capability (1) 00-63: Trunk Route No. (2) 1: No dial pulses are sent out
END		

C	DESCRIPTION	DATA
CM20	Assign the access code for Paging Access and Answer.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A070-A079 : For Paging Access/Paging Answer (Zone 0-9) A080 : Canceling of Paging (Delay Operation)
CM30	Assign the data for Paging Trunk to the trunk number assigned by CM10 as follows. Paging Answer — Trunk 0--------------------50 |　　　| 9--------------------59	• YY=00 Trunk Route allocation (1) 000-255: Trunk No. (2) 50 - 59: Trunk Route No. • YY=28 Zone/Kind of Paging (1) 000-255: Trunk No. (2) X Z X: 0-9: Paging Answer Zone 0-9 Z: Kind of Paging 0: No answer 2: Non-delay answer 4: Non-delay and delay answer
CM35	Assign the Paging Trunk to the trunk route number assigned by CM30 YY=00.	• YY=00 (1) 50-59: Trunk Route No. (2) 05 • YY=08 Dial Pulse Sending Capability (1) 50-59: Trunk Route No. (2) 1: No dial pulses are sent out

END

To provide a Paging Key to ATTCON/DESKCON:

START

	DESCRIPTION	DATA
CM90	Assign a Paging key to ATTCON/ DESKCON.	(1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6150-F6159: Paging key (Route No. 50-59)
CM08	Enable pressing the Paging key on ATTCON/ DESKCON when the attendant is in idle.	(1) 445 (2) 0 : Available 1◀ : Not available

END

Hardware Required

Paging Trunk (COT card)
DK card or MP card (built-in DK)
Paging Equipment provided locally

FAX ARRIVAL INDICATOR

Programming

Hotlines or House Phone feature assignment is used to implement this feature.
The number of facsimile station numbers and facsimile call station numbers that can be assigned varies with each of the following cases.

- When Hotlines-Inside/Outside are used, a maximum of 100 facsimile stations can be assigned. In addition, a maximum of 100 facsimile call stations can be assigned.
- When House Phone groups are used, a maximum of four facsimile stations can be assigned. In addition, there is no limit to the number of facsimile call stations that can be assigned to each facsimile station.

(1) Hotlines

START	DESCRIPTION	DATA
CM10	Assign the fax call station number. This number is used as the fax call indicator button on the D^{term}. Also this is the number to which the incoming fax call is directed.	(1) 000-763: LEN (2) X-XXXXXXXX:Single Line Station No. FX-FXXXXXXXX:My Line No.
CM11	Assign a virtual number to be used as a fax call station number. (Similar to CM10 above but using a virtual extension instead of a real station number.)	(1) 000-255: Virtual LEN (2) X-XXXXXXXX:Virtual Extension No.
CM13	Assign the function of fax call station to the station or extension assigned above in either CM10 or CM11.	• YY=29 (1) X-XXXXXXXX: Station No. (2) 0 : Fax call station 1◀ : Ordinary station
CM52	Assign the fax call station and fax station using Hotlines feature.	• YY=00-99 (1) 0 : Fax Call Station (calling side) This is the extension to which the call is directed and will be the fax call indicator on the D^{term}. (2) X-XXXXXXXX: Station No. (1) 1 : Fax Station (called side) This is the actual single line port to be connected to the facsimile machine. (2) X-XXXXXXXX: Station No.
A		

A	**DESCRIPTION**	**DATA**
CM12	Specify the accommodation of the fax call station to the D^{term}. **Note:** *This command needs to be set when assigning a single line station as a fax call station number by CM10.*	• YY=05 (1) X-XXXXXXXX: Fax Call Station No. (2) 0 : Accommodated 1◀ : Not accommodated
CM90	Assign the fax call station number as the arrival indicator to the D^{term}.	• YY=00 (1) My Line No. + $\boxed{,}$ + key No. (2) X-XXXXXXXX: Fax Call Station No.
END		

(2) House Phone

START	DESCRIPTION	DATA
CM10	Assign the fax call station number. This number is used as the fax call indicator button on the D$^{\text{term}}$. Also this is the number to which the incoming fax call is directed.	(1) 000-763: LEN (2) X-XXXXXXXX: Single Line Station No. FX-FXXXXXXXX:My Line No.
CM11	Assign a virtual number to be used as a fax call station number. (Similar to CM10 above but using a virtual extension instead of a real station number.)	(1) 000-255: Virtual LEN (2) X-XXXXXXXX:Virtual Extension No.
CM13	Assign the function of fax call station to the station or extension assigned above in either CM10 or CM11.	• YY=29 (1) X-XXXXXXXX: Station No. (2) 0 : Fax call station 1◀ : Ordinary station
CM12	Assign the fax call station numbers to a House Phone group.	• YY=03 (1) X-XXXXXXXX: Fax Call Station No. (2) 00-03: Fax Call Group No.
	Specify the accommodation of the fax call station to the D$^{\text{term}}$. **Note:** *This command needs to be set when assigning a single line station as a fax call station number by CM10.*	• YY=05 (1) X-XXXXXXXX: Fax Call Station No. (2) 0 : Accommodated 1◀ : Not accommodated
CM51	Assign fax station using House Phone feature.	• YY=14 (1) 00-03: Fax Station (This is the actual single line port to be connected to the facsimile machine.) (2) X-XXXXXXXX: Station No.
CM90	Assign the fax call station number as the arrival indicator to the D$^{\text{term}}$.	• YY=00 (1) My Line No. + $\boxed{,}$ + key No. (2) X-XXXXXXXX: Fax Call Station No.
END		

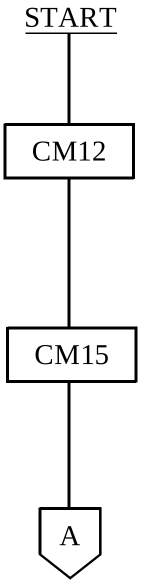
FLEXIBLE LINE KEY ASSIGNMENT

Programming

For the applicable feature programming on Flexible Line Key, refer to each feature:

- TRUNK-DIRECT APPEARANCES on Page 489
- SAVE AND REPEAT on Page 425
- DO NOT DISTURB on Page 252
- INTERCOM on Page 293
- HOTLINE-INSIDE/OUTSIDE on Page 287
- PROPRIETARY MULTILINE TERMINAL on Page 405
- STATION SPEED DIALING on Page 455

To indicate the busy/idle status of the extensions accommodated to the Flexible Line Keys on the D^{term} Series E Terminal without the One Touch Speed Dial Keys, assign the following data. Station Speed Dialing memory and One Touch Key memory assignment are used to implement this feature.



DESCRIPTION	DATA
Assign Service Restriction Class A to each station.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀ : Service Restriction Class A
Allow Station Speed Dialing in the Service Restriction Class A assigned by CM12 YY=02.	• YY=07 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow

A

DESCRIPTION

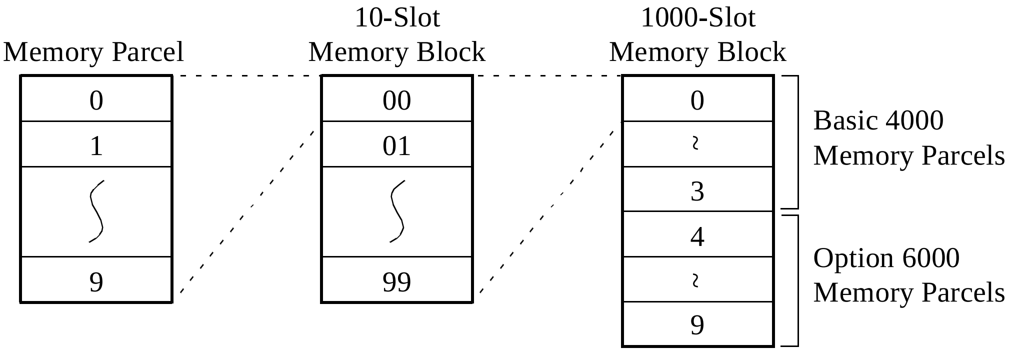
CM73

Allocate the memory area for Station Speed Dialing to each station.
The same memory area must be assigned on CM73 and CM94.

The memory area for storing one called number of Station Speed Dialing is called a “Memory Parcel”. An assembly of 10 Memory Parcels is called a “10-Slot Memory Block,” and one hundred 10-Slot Memory Blocks are called a “1000-Slot Memory Block”.

DATA

(1) X-XXXXXXXX:My Line No.
(2) W XX Y ZZ
(3) W : 0-3 (Basic): 1000- Slot Memory Block No. **Note**
(4) XX: 00-99: Memory Start Block No.
(5) (10-Slot Memory Block)
(6) Y : Facility for programming the dialed number from the station
(7) 0/1: Effective/Ineffective
(8) ZZ : 01-10: Number of 10-Slot Memory Blocks



Note: *1000-Slot Memory Block number 4-9 (6000 Memory Parcels) cannot be used to provide BLF function on D^{term} line key.*
For example, if the stored number intended is 10 for Station Number 300, 20 for Station Number 301, and 30 for Station Number 302, the memory areas assignment is as follows.

Station No. *(1st Data)*	*1000-Slot Memory Block No.* *(2nd Data: W)*	*Memory Start Block No. (10-Slot Memory Block)* *(2nd Data: XX)*	*Number of 10-Slot Memory Block* *(2nd Data: ZZ)*
300	*0*	*00*	*01*
301	*0*	*01*	*02*
302	*0*	*03*	*03*
303	*0*	*06*	*01*

B

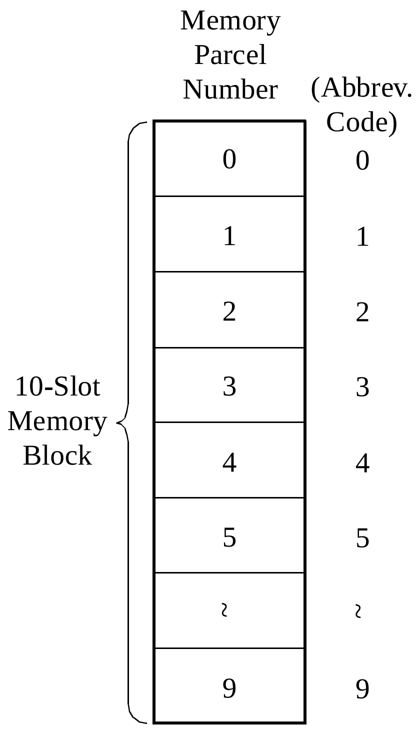
B

DESCRIPTION	**DATA**

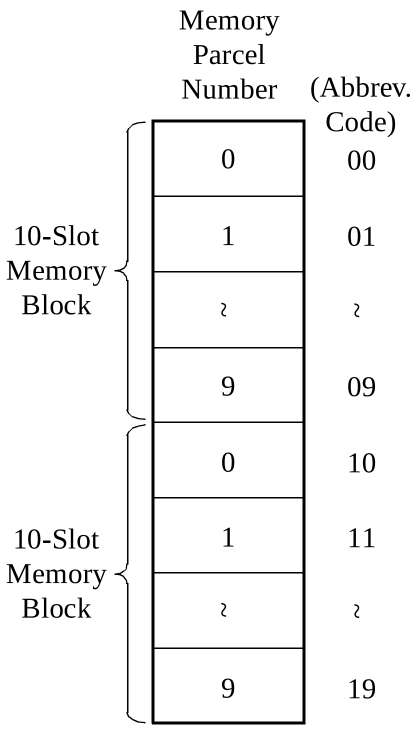
CM73

The abbreviated codes for this feature are automatically determined by assigning this command, on a station basis.
If the number of Memory Parcels per station does not exceed 10, then Abbreviated Code =0-9.
If the number of Memory Parcels per station exceeds 11, then Abbreviated Code =00-99.
The following figure shows the relation between Abbreviated Codes and Memory Parcels.

In the case of 10 Memory Parcels



In the case of 20 Memory Parcels



C

	DESCRIPTION	**DATA**
C		
CM94	Allocate the memory area for Station Speed Dialing to each station. The same memory area must be assigned on CM73 and CM94, to provide BLF function on D^{term} line key.	(1) X-XXXXXXXX:My Line No. (2) X YY 0 ZZ X : 0-3 (Basic): 1000-Slot Memory Block No. **Note** YY: 00-99: 10-Slot Memory Start Block No. ZZ : 01-10: Number of 10-Slot Memory Blocks

Note: *1000-Slot Memory Block number 4-9 (6000 Memory Parcels) cannot be used to provide BLF function on D^{term} line key.*

CM90

Assign Station Speed Dialing keys on each D^{term}.

For the key number and the last two digits of the second data, assign the same number as follows.

1st Data	2nd Data
XXXXXXXX, 01	F1101
XXXXXXXX, 02	F1102
XXXXXXXX, 03	F1103
⋮	⋮
XXXXXXXX, 16	F1116

- YY=00

(1) My Line No. + $\boxed{,}$ + Key No.
(2) F11XX
XX: 00-99: Station Speed Dialing 00-99

Note 1: *The initial setting of key layout is for 16 Line/Trunk/Feature Keys (Key No. 01-16).*
When using key No. 17-24, data setting of CM12 YY=24, 2nd data=0 is required.

Note 2: *A station user should set the required extension number to the line key on D^{term}.*

CM08

Specify the type of busy indication on the BLF of the D^{term} line key as station base or extension base.

(1) 269
(2) 0 : Station base
1 ◀ : Extension base

END

FLEXIBLE NUMBERING PLAN

Programming

START

	DESCRIPTION	DATA
CM29	Assign a Numbering Plan Group to each Tenant.	(1) 00-63: Tenant No. (2) 710-713: Numbering Plan Group 0-3
CM20	Specify the number of digits for station numbers. **Example:** *For setting Station No. "2XXX"* *(1) 2* *(2) 804* **Note:** *When the following features are used with AP00, do not assign 5 or more digit station number:* • *SMDR/PMS* • *Front Desk Terminal (D^{term})*	• Y=0-3 Numbering Plan Group 0-3 (1) X: First digit of station no. (2) 801: 1 digit 802: 2 digits 803: 3 digits 804: 4 digits 805: 5 digits 806: 6 digits 807: 7 digits 808: 8 digits
CM10	Assign station numbers to the required LEN according to the Numbering Plan specified by CM20. For feature and trunk access codes, refer to the programming of individual features.	(1) 000-763: LEN (2) X-XXXXXXXX: Station No.

END

To provide Single-Digit Feature Access Code:

START	DESCRIPTION	DATA
CM08	To activate this feature, set the data for 050, 051, 069 and 148 to “1.”	(1) 050 : *Button as Switch Hook Flash. (2) 1◀ : Ineffective (1) 051 : *Button as Switch Hook Flash. (2) 1◀ : Ineffective (1) 069 : Single-Digit Dialing on BT Connection (2) 1◀ : Step Call (1) 148 : Same Last-Digit Redialing on BT Connection (2) 1◀ : Ineffective
	Provide the System with the Single-Digit Feature Access Code on RBT (or Voice Call Connection).	(1) 156 (2) 0: Available
	Provide the System with the Single-Digit Feature Access Code on BT Connection.	(1) 208 (2) 0: Available
END		

FLEXIBLE RINGING ASSIGNMENT

Programming

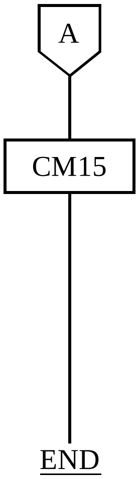
START

	DESCRIPTION	DATA
CM08	Specify the method of tone ringer selection. **INITIAL**	(1) 390 (2) 1◀ : As per CM15 YYY=083, 084, CM35 YY=34
CM12	Assign the Service Restriction Class C for the ring tone for D^{term}s on internal calls to required stations.	• YY=07 (1) X-XXXXXXXX: Station No. (2) 00 - 15 ◀: Service Restriction Class C
CM15	Specify the ring tone for D^{term}s on internal calls.	• YY=83, 84 (1) 00-15: Service Restriction Class C assigned by CM12 YY=07 (2) 0 : See left table. 1◀ : See left table.

Y		RING FREQUENCY
83	84	
0	0	600 + 700 [Hz]
1	0	1024 + 1285 [Hz] × 16 [Hz]
0	1	480 + 606 [Hz] × 8 [Hz]
1	1	480 + 606 [Hz] × 16 [Hz]

	DESCRIPTION	DATA
CM35	Specify the ring tone for incoming calls to each trunk route.	• YY=34 (1) 00-63: Trunk Route No. (2) 0 : 1024+1285 [Hz]×16 [Hz] 1 : 480+606 [Hz]×8 [Hz] 2 : 600+700 [Hz] 3◀ : 480+606 [Hz]×16 [Hz]
CM90	Disable the ringing on each line/extension key of a D^{term}, if required. Refer to DELAYED RINGING, when providing Delayed Ringing to each line/ extension key on Page 185.	• YY=01 Day Mode (1) My Line No. + $\boxed{,}$ + Key No. (2) 0: Disabled
CM12	Assign the Service Restriction Class B for Off-Hook Ringing to required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ ZZ: 00-15◀: Service Restriction Class B

A



DESCRIPTION	DATA
Allow Off-Hook Ringing for incoming calls to Line/Trunk Keys on D^{term}s in the Service Restriction Class B assigned by CM12 YY=02. **Note:** *This data is effective in the following status.* • *Hook Switch-OFF HOOK* • *SPEAKER Lamp-OFF*	• YY=68 (1) 00-15 : Service Restriction Class B assigned by CM12 YY=02 (2) 0 : Restricted 1◀ : Allow

Hardware Required

D^{term} and DLC card

FORCED ACCOUNT CODE

Programming

There are two kinds of processor for Forced Account Code. One is MP, the other is AP01.
For MP, EXPMEM card can be used to expand the number of codes.

(1) With MP card

START	DESCRIPTION	DATA
CM08	Designate the processor for Forced Account Code as MP card.	(1) 216 (2) 0: MP card
	Specify whether Service Set Tone is provided after dialing the access code for Forced Account Code.	(1) 362 (2) 0 : No tone 1◀ : Service Set Tone
CM12	Assign the Service Restriction Class A for Forced Account Code to required stations.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Forced Account Code in the Service Restriction Class A assigned by CM12 YY=02.	• YY=31 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for Forced Account Codes.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A087
CM42	Specify the maximum number of digits for Forced Account Code.	(1) 12 (2) 01-16 : 1 digit - 16 digits NONE◀ : 16 digits
A		

	DESCRIPTION	DATA
A CM2A	Assign the ID Code Development number for Forced Account Code.	• YY=A0 (1) 1 (2) 0-9: ID Code Development No. 00-09
	Assign the ID Code for Forced Account Code.	• YY=00-09 ID Code Development No. 00-09 (1) X-XX...XX (Max. 16 digits): ID Code for Forced Account Code (2) 0000-2999: ID Code Pattern No.
	Assign the purpose of ID Code.	• YY=10 (1) 0000-2999: ID Code Pattern No. (2) 0 : Validate the ID Code entered from stations and trunks 1 : Validate the ID Code entered from stations 3◀ : Invalidate the ID Code entered from stations and trunks
	Assign the desired Trunk Restriction Class for each ID Code Pattern number.	• YY=11 (1) 0000-2999: ID Code Pattern No. (2) 1◀: Unrestricted (RCA) 2 : Non-Restricted-1 (RCB) 3 : Non-Restricted-2 (RCC) 4 : Semi-Restricted-1 (RCD) 5 : Semi-Restricted-2 (RCE) 6 : Restricted-1 (RCF) 7 : Restricted-2 (RCG) 8 : Fully-Restricted (RCH)
	Assign the desired Service Restriction Class A to each ID Code Pattern number. The features available in each class are assigned by CM15.	• YY=12 (1) 0000-2999:ID Code Pattern No. (2) 00-15◀ :Service Restriction Class A
	Assign the desired Service Restriction Class B to each ID Code Pattern number. The features available in each class are assigned by CM15.	• YY=13 (1) 0000-2999:ID Code Pattern No. (2) 00-15◀ :Service Restriction Class B
END	Assign the desired Service Restriction Class C to each ID Code. The features available in each class are assigned by CM15.	• YY=14 (1) 0000-2999:ID Code Pattern No. (2) 00-15◀ :Service Restriction Class C

Note: *The following number of Forced Account Codes including Authorization Codes and DISA codes can be defined.*
MP without EXPMEM card : Approximately 1000 codes
MP with EXPMEM card : Approximately 3000 codes
Number of the codes varies with the number of digits assigned to each code. For details, refer to the Business/Hotel/Data Features and Specifications.

(2) With AP01 card

START

	DESCRIPTION	DATA
CM05	Assign the AP number to AP01 card. **Note:** *The AP number must match the SENSE switch setting on the AP01 card.* **INITIAL**	• Y=0 (1) 04-15: AP No. (2) 07: AP01
CM08	Designate the processor for Forced Account code as AP01 card.	(1) 216 (2) 1◀ : AP (AP01 card)
	Specify whether Service Set Tone is provided after dialing the access code for Forced Account Code.	(1) 362 (2) 0 : No tone 1◀ : Service Set Tone
CM12	Assign the Service Restriction Class A for Forced Account Code to required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀ :Service Restriction Class A
CM15	Allow Forced Account Code in the Service Restriction Class A assigned by CM12 YY=02.	• YY=31 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CMD5	Set the ID Code and its temporary Service Class used for Forced Account Code. For the details of the programming, refer to AUTHORIZATION CODE (with AP01 card).	• Y=0 • Y=1 • Y=3 • Y=A
CM20	Assign the access code for Forced Account Code.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A087
CM42	Specify the maximum number of digits for Forced Account Code.	(1) 12 (2) 01-10: 1 digit - 10 digits NONE◀ : 10 digits If Check Code is provided, the maximum number of digits is limited to 8.

END

Note 1: *Approximately 1,000 Forced Account Codes including Authorization Codes and DISA codes can be defined. The number of codes varies with the number of digits assigned to each code. For details, refer to the Business/Hotel/Data Features and Specifications.*

Note 2: *When deleting all ID codes stored in the AP01 card at one time, do the following operation:*
$\boxed{\text{ST}}$ + D60 + $\boxed{\text{DE}}$ + 0000 + $\boxed{\text{DE}}$ + CCC + $\boxed{\text{EXE}}$

Hardware Required

EXPMEM card on MP card, or AP01 card if required

GROUP CALL

Automatic Conference (6/10 Party)

START

	DESCRIPTION	DATA
CM10	Assign the card number of the Conference trunk (CFT card) to the required LEN. **INITIAL** **Note:** *The CFT card number must be assigned to the first LEN (Level 0) of each LT slot.*	(1) (1) 000-763: LEN (2) (2) ED00-ED03: CFT Card No.
CM56	Assign the stations which belongs to each paging group, and their number within the group. A maximum of 9 stations can be paged simultaneously except the conference leader. **Note 1:** *Single line telephones, D^{term}s and PS can be assigned as the station within the group.* *A virtual-line cannot be assigned.* **Note 2:** *A station can belong to multiple groups.*	• YY=00-07 Simultaneous Paging Group 0-7 (1) 00-15: Serial No. within the Group (2) X-XXXXXXXX: Station No.
CM12	Assign a Service Restriction Class A to each station.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Simultaneous Paging to the group in the Service Restriction Class A.	• YYY=119 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 0: Allow
CM20	Assign the access code of paging groups for Group Call-Automatic Conference (6/10 Party). **Note:** *Even if an extension does not belong to the conference group, the extension can page the conference group, and can re-participate in the conference if there is an idle circuit on the Conference Trunk.*	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX : Access Code (2) A200-A207 : Simultaneous Paging Group 0-7 A210-A217 : Re-participation Group 0-7

A

	DESCRIPTION	DATA
A		
CM90	Assign a Group Call-Automatic Conference (6/10 Party) key of each paging group to the D$^{\text{term}}$, if required. **Note:** *Even if an extension does not belong to the conference group, the extension can page the conference group, and can re-participate in the conference if there is an idle circuit on the Conference Trunk.*	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0B00-F0B07: Simultaneous Paging Group 0-7 F0B10-F0B17: Re-participation Group 0-7
CM41	Specify the duration of simultaneous paging.	• Y=0 (1) 95 (2) 01-99: 4-396 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.
END		

Hardware Required

CFT trunk

2 Way Calling

START

	DESCRIPTION	DATA
CM56	Assign the stations which belongs to each paging group, and their number within the group. A maximum of 9 stations can be paged simultaneously except the conference leader. **Note 1:** *Single line telephones, D^{term}s and PS can be assigned as the station within the group.* *A virtual-line cannot be assigned.* **Note 2:** *A station can belong to multiple groups.*	• YY=00-07: Simultaneous Paging Group 0-7 (1) 00-15: Serial No. within the Group (2) X-XXXXXXXX: Station No.
CM12	Assign a Service Restriction Class A to each station.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Simultaneous Paging to the group in the Service Restriction Class A.	• YYY=119 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 0 : Allow
CM20	Assign the access code of paging groups for Group Call-2 Way Calling. **Note:** *Even if an extension does not belong to the conference group, the extension can page the conference group.*	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX : Access Code (2) A220-A227 : Simultaneous Paging Group 0-7
CM90	Assign a Group Call-2 Way Calling key of each paging group to the D^{term}, if required. **Note:** *Even if an extension does not belong to the conference group, the extension can page the conference group.*	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0B20-F0B27: Simultaneous Paging Group 0-7

END

GROUP CALL BY PILOT NUMBER DIALING

[Series 2300 (R4.1) software required]

Programming

START	DESCRIPTION	DATA
CM11	Assign the Virtual Line station number for Group Call Pilot Station to the required Virtual LEN. **Note:** *This Virtual Line station must be exclusively used for Group Call Pilot Station.*	(1) 000-255: Virtual LEN (2) X-XXXXXXXX: Virtual Line Station No.
CM13	Provide the Virtual Line station with Group Call By Pilot Number Dialing function.	• YY=45 (1) X-XXXXXXXX: Virtual Line Station No. assigned by CM11 (2) 0: To provide
CM12	Specify the group number which is the destination of a call from the Group Call Pilot Station.	• YY=43 (1) X-XXXXXXXX: Virtual Line Station No. assigned by CM11 (2) 00-19: Group Call No. 00-19
A		

A

	DESCRIPTION	DATA
CM18	To provide the Station Hunting group of the Group Call Pilot Stations, assign station numbers, one by one, as shown below.	• Y=0 (1) X-XXXXXXXX: Virtual Line Station No. assigned by CM11 (2) X-XXXXXXXX: Another Virtual Line Station No. assigned by CM11

1st Operation
- (1) Virtual Line Station A
- (2) Virtual Line Station B

2st Operation
- (1) Virtual Line Station B
- (2) Virtual Line Station C

Note: *The number of Virtual Line stations per Station Hunting group set by CM18 becomes the maximum number of simultaneous calling in each group of Group Call By Pilot Number Dialing.*

	DESCRIPTION	DATA
	Assign the Pilot Station to required station number within the Station Hunting group. For the member stations, set the data to “0”.	• Y=1 (1) X-XXXXXXXX: Virtual Line Station No. assigned by CM11 (2) 0◀: Member Station 1: Pilot Station

Note: *The maximum number of stations that can be included on one Station Hunting group is 32 including the Pilot Station.*

	DESCRIPTION	DATA
CM57	Assign the station numbers which are to be included in the Group Call group, and their serial numbers in the group.	• YY=10-29 Group Call No. 00-19 (1) 00-31: Serial No. within the Group (2) X-XXXXXXXX: Station No./Virtual Station No. assigned by CM10

Note 1: *The maximum number of Group Call stations per group is as follows:*

Single line station/D^{term} (My Line/Virtual Line):	*32 stations*
PS:	*Eight stations (except the PS in roaming state)*

Note 2: *The maximum number of simultaneous calls for single line stations/PSs is 12 per FP. When the number of single line stations/PSs exceeds 12, allocate the rest of the stations to another FP. For a D^{term} (My Line/Virtual Line), there is no limit.*

END

GROUP LISTENING

Programming

	DESCRIPTION	DATA
START		
CM12	Assign the Service Restriction Class B for Group Listening to the required D^{term}s.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ ZZ: 00-15◀ : Service Restriction Class B
CM15	Allow Group Listening in the Service Restriction Class B assigned by CM12 YY=02.	• YY=70 (1) 00-15 : Service Restriction Class B assigned by CM12 YY=02 (2) 0 : Allow
END		

HOLD

Call Hold

Programming

START	DESCRIPTION	DATA
CM12	Assign Service Restriction Class A to the required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀ : Service Restriction Class A
CM15	Allow Call Hold in the Service Restriction Class A assigned by CM12 YY=02.	• YY=01 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for Call Hold.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX : Access Code (11) (2) A046 : Call Hold
CM90	Assign a Call Hold key to the D^{term}, if needed. **Note 1:** *This line key is not the same key normally assigned to the key labeled HOLD. That key is normally assigned the Non Exclusive/Exclusive Hold feature.* **Note 2:** *When a station has a Camp-on Call, flashing the switch hook and dialing the Call Hold feature results in the connecting to the camped-on party.*	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0046
END		

Dual Hold

Programming

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class B for this feature to required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ ZZ: 00-15◀ : Service Restriction Class B
CM15	Allow Dual Hold in the Service Restriction Class B assigned by CM12 YY=02.	• YY=64 (1) 00-15 : Service Restriction Class B assigned by CM12 YY=02 (2) 1◀ : Allow
END		

Exclusive Hold

Programming

START	DESCRIPTION	DATA
CM08	Provide the system with Exclusive Hold.	(1) 130 (2) 1◀ : Available
CM41	Specify the Recall timing on Exclusive Hold.	• Y=0 (1) 06 (2) 01-98 : 4-392 sec. in 4 sec. increments If no data is set, the default setting is 236-240 seconds.
END		

HOTLINE-INSIDE/OUTSIDE

Programming

For internal Hotline:

START

DESCRIPTION / **DATA**

CM12

Assign the Hotline station to the required stations.

- YY=03

(1) X-XXXXXXXX: Station No.
(2) 04: Hotline Station

CM52

Set up the Hotline pair. Bidirectional Hotlines should be assigned as follows:

Hotline Pair No.	Calling Side	Called Side
00	Station A	Station B
01	Station B	Station A

Note 1: *There is a maximum of 100 assignments for Hotline destination. If internal bidirectional Hotline calling is required, two assignments (one for each direction) must be made. A maximum of 50 bidirectional Hotlines can be assigned.*

- YY=00-99 Hotline Pair No.

(1) 0: Calling Side
(2) X-XXXXXXXX: Station No. /Data Station No. assigned by CM12 YY=03
(3) 1: Called Side
(4) X-XXXXXXXX: Station No. /Data Station No.
E000-E007: Attendant Console No.

Note 2: *Do not assign station number with first digit "0".*

CM08

Specify the result of a Switch Hook Flash on each Hotline station.

To allow Hotline stations to transfer a call or access a feature, set the data to "0".

(1) 057
(2) 0 : Special Dial Tone
1◀ : Attendant Recall

END

For Hotline-Outside:

START	DESCRIPTION	DATA
CM12	Assign a Hotline to the required stations.	• YY=03 (1) X-XXXXXXXX: Station No. (2) 04: Hotline
CM71	Allocate the memory area for the Hotline-Outside call. For example, to assign the 10 Hotline-Outside calls into No. 100 through No. 109 Memory Slots, 2nd data is "100010." Abbreviated Codes are automatically assigned as shown below: Memory Slot 100 — Abbrev. Code 00 ≀ ≀ Memory Slot 109 — 09	(1) 65: For Hotline-Outside (2) XXX YYY XXX : 000-299: Starting Memory Slot No. in blocks YYY : 001-100: Number of Memory Slots to be assigned in blocks
CM72	Set the outside party's number to each Memory Slot number.	• Y=0 (1) 000-299 : Memory Slot No. (2) XXXX + $\boxed{,}$ + YY...Y: Outside Party's No. XXXX : Access Code (Max. 4 digits) $\boxed{,}$: Separator Mark YY...Y : Outside Party's No. (Max. 26 digits) • Y=1 (1) 000-299 : Memory Slot No. (2) XXX...X : Station Name Character Code (Max. 32 digits: 16 characters) (3) See APPENDIX B: CHARACTER CODE TABLE. • Y=2 (1) 000-299 : Memory Slot No. (2) XXX...X : Station Name Character by MAT/CAT (Max. 16 characters)
CM52	Define the Hotline pairs.	• YY=00-99 Hotline pair No. (1) 0: Calling Station 1: Called Outside party (2) Station No. (For Calling Station) C XX (For Called Outside party) XX: Abbreviated Code given by CM71 **Note:** *Do not assign station number with first digit "0".*
END		

For Brokerage Hotline:

START	DESCRIPTION	DATA
CM11	Assign the Virtual station numbers to the required virtual LEN.	(1) 000-255: Virtual LEN (2) X-XXXXXXXX: Virtual Station No.
CM12	Assign the Hotline to the Virtual station number assigned by CM11.	• YY=03 (1) X-XXXXXXXX: Virtual Station No. (2) 04: Hotline
CM52	Define the Hotline pairs.	• YY=00-99 Hotline Pair No. (1) 0: Calling party (2) X-XXXXXXXX: Virtual Station No. (1) 1: Called party (2) X-XXXXXXXX: Station No. C XX (For Outside party) XX : Abbreviated Code given by CM71 (See Hotline-Outside) **Note:** *Do not assign station number with first digit "0".*
CM90	Assign the Virtual Line station number and Release keys on the D^{term}.	• YY=00 (1) My Line No. + $\boxed{,}$ +Key No. (2) X-XXXXXXXX: Virtual Station No. (3) F1020: Release key
END		

INDIVIDUAL ATTENDANT ACCESS

Programming

START	DESCRIPTION	DATA
CM10	Assign an Attendant Console Number to each ATTCON/DESKCON.	(1) 000-763: LEN (2) E000-E007: ATTCON No.
CM20	Assign the access code for Individual Attendant Access.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A095
CM08	Specify the Individual Attendant Access capability provided from a station belonging to a different tenant.	(1) 143 (2) 0 : Restricted 1◀ : Allowed
END		

INTERCEPT ANNOUNCEMENT

Programming

START	DESCRIPTION	DATA
CM10	Assign the Digital Announcement Trunk card number to the required LEN. **Note:** *The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.*	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM 0/1: EB002-EB031 For PIM 2/3: EB032-EB063 For PIM 4/5: EB064-EB095 For PIM 6/7: EB096-EB127 **Note:** *EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.*
CM12	Assign Service Restriction Class A to the required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Digital Announcement Trunk access in the Service Restriction Class A assigned by CM12 YY=02.	• YY=33 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM49	Assign the function to each Digital Announcement Trunk card.	• YY=00 (1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk Card No. (EB002-EB127) (2) 0A00 : Call Forwarding-Intercept Announcement
A		

	DESCRIPTION	DATA
A		
CM51	Assign a Digital Announcement Trunk card as the destination of the call intercepted on each Tenant.	• YY=07 (1) 00-63: Tenant No. (2) EB000-EB127: Digital Announcement Trunk Card No.
CM20	To record, replay, or delete a message, assign the appropriate Digital Announcement Trunk access codes.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A100: Digital Announcement Trunk access (Record) A101: Digital Announcement Trunk access (Replay) A102: Digital Announcement Trunk access (Delete)
END		

Note: *Only one common message can be provided for the different intercept conditions.*

Hardware Required

DAT card or MP card (built-in DAT)

INTERCOM

Manual Intercom

Programming

	DESCRIPTION	DATA
START		
CM11	Assign a Manual Intercom number to the Virtual LEN. The last two digits of each Manual Intercom number represent the Manual Intercom Group number. **Note:** *A Manual Intercom group can consist of two to six D^{term}s. A maximum of 25 Manual Intercom groups can be assigned per system.* **Note:** GROUP No. — INTERCOM No. 00 — A200, A300, A400, A500, A600, A700 01 — A201, A301, A401, A501, A601, A701 ⋮ — ⋮ 24 — A224, A324, A424, A524, A624, A724	(1) 000-255: Virtual LEN (2) A200-A224 A300-A324 A400-A424 A500-A524 A600-A624 A700-A724 (Manual Intercom Number) A X YY X : 2-7: Serial No. in a Group YY: Manual Intercom Group No.
CM12	Assign the Manual Intercom station.	• YY=03 (1) A200-A724: Manual Intercom No. assigned by CM11 (2) 06: Manual Intercom
CM56	Assign the My Line No. of each D^{term} to each Manual Intercom number.	• YY=11 (1) A200-A724: Manual Intercom No. assigned by CM11 (2) X-XXXXXXXX: My Line No.
A		

	DESCRIPTION	DATA
A		
CM90	Assign the MANUAL INTERCOM key to each D^{term}.	• YY=00 (1) My Line No. + $\boxed{,}$ +Key No. (1) A200-A724: Manual Intercom No. of each D^{term}
CM08	Specify the Manual Intercom access capability when a called intercom station has set Do Not Disturb.	(1) 238 (2) 0 : No Ring on 1◀ : Ring on (Allowed)
END		

Automatic Intercom

Programming

	DESCRIPTION	DATA
START		
CM11	Assign an Automatic Intercom number to the Virtual LEN. The Automatic Intercom stations are paired as shown below. GROUP No. — INTERCOM No. 00 — A000, A100 01 — A001, A101 ≀ — ≀ 31 — A031, A131 **Note:** *The maximum number of Automatic Intercom paired stations per system is 32.*	(1) 000-255: Virtual LEN (2) A000-A031 A100-A131 (Automatic Intercom Number) A X YY X : 0/1 to be made one pair. YY : 00-31: Automatic Intercom Group No.
CM12	Assign each Automatic Intercom station.	• YY=03 (1) A000-A031, A100-A131: Automatic Intercom No. assigned by CM11 (2) 05: Automatic Intercom
CM56	Assign the My Line number to each Automatic Intercom number.	• YY=10 (1) A000-A031, A100-A131: Automatic Intercom No. assigned by CM11 (2) X-XXXXXXXX: My Line No.
A		

A

	DESCRIPTION	DATA
CM90	Assign the AUTOMATIC INTERCOM key to each D^{term}.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (1) A000-A031, A100-A131: Automatic Intercom No. of each D^{term}
CM08	Specify the Automatic Intercom access capability when a called intercom station has set Do Not Disturb.	(1) 237 (2) 0 : Restricted 1◀ : Allowed
CM13	Specify the busy indication on the Automatic Intercom LED when the other D^{term} of the same Automatic Intercom Group is busy.	• YY=11 (1) X-XXXXXXXX: My Line No. (2) 0 : Allowed 1◀ : Restricted

END

Note: *To activate the Voice Announcement call, refer to INTERNAL TONE/VOICE SIGNALING on Page 298.*

Dial Intercom

Programming

START	DESCRIPTION	DATA
CM11	Assign a Dial Intercom number to the Virtual LEN. The last two digits of each Dial Intercom number represent the Dial Intercom Group number. The first digit is the intercom code (0-9) assigned to the associated virtual extension. GROUP No. INTERCOM No. 00 B000, B100, B200 — B900 01 B001, B101, B201 — B901 ≀ ≀ 24 B024, B124, B224 — B924 **Note:** *A maximum of 25 Dial Intercom groups are available per system. A maximum of ten D^{term}s can belong to a Dial Intercom group.*	(1) 000-255: Virtual LEN B000-B024 B100-B124 B200-B224 B300-B324 B400-B424 B500-B524 B600-B624 B700-B724 B800-B824 B900-B924 (Dial Intercom Number) B X YY X : 0-9: Intercom Code YY : 00-24: Dial Intercom Group No.
CM12	Assign the Dial Intercom station.	• YY=03 (1) B000-B924 : Dial Intercom No. assigned by CM11 (2) 07: Dial Intercom
CM56	Assign the My Line number to each Dial Intercom number.	• YY=12 (1) B000-B924: Dial Intercom No. (2) X-XXXXXXXX: My Line No.
CM90	Assign the DIAL INTERCOM key to each D^{term}.	• YY=00 (1) My Line No. + $\boxed{,}$ +key No. (2) Dial Intercom No. of each D^{term}
A		

A	DESCRIPTION	DATA
CM12	If the Private Dial Intercom is provided, assign the Service Restriction Class A to each Dial Intercom number.	• YY=02 (1) B000-B924 : Dial Intercom No. assigned by CM11 (2) XX ZZ XX: 00-15 ◀ : Service Restriction Class A
CM15	Restrict Executive Override in the Service Restriction Class A assigned by CM12 YY=02.	• YY=09 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 0 : Restricted
CM08	Specify the Dial Intercom access capability when a called intercom station has set Do Not Disturb.	(1) 239 (2) 0 : Restricted 1◀ : Allowed
END		

Note: *To activate the Voice Announcement call, refer to INTERNAL TONE/VOICE SIGNALING on Page 298.*

INTERNAL TONE/VOICE SIGNALING

Programming

START	DESCRIPTION	DATA
CM08	To activate the Single-Digit Feature Access Code feature, set the data for 050, 051, 069 and 148 to “1”.	(1) 050:* Button as Switch Hook Flash. (2) 1◀ : Ineffective (1) 051:# Button as Switch Hook Flash. (2) 1◀ : Ineffective (1) 069 : Single Digit Dialing on BT Connection (2) 1◀ : Step Call (1) 148 : Same Last Digit Redialing on BT Connection (2) 1◀ : Ineffective
	Provide the System with the Single-Digit Feature Access Code on RBT or Voice Call connection.	(1) 156 (2) 0: Available
	Specify if Voice Call is provided when calling a D$^{\text{term}}$ is set to Voice First from a Single-Line Telephone or a D$^{\text{term}}$ without an LCD.	(1) 270 (2) 0 : Not provided (Busy Tone) 1 ◀ : Provided
CM12	Assign the Service Restriction Class B for Voice Call (called side) to the required D$^{\text{term}}$.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ ZZ: 00-15◀: Service Restriction Class B
CM15	Allow Voice Call (called side) in the Service Restriction Class B assigned by CM12 YY=02.	• YY=67 (1) 00-15 : Service Restriction Class B assigned by CM12 YY=02 (2) 1◀ : Allow
A		

A

	DESCRIPTION	**DATA**
CM12	Assign the Service Restriction Class C for Voice Call Mike Off (called side) to the required D^{term}.	• YY=07 (1) X-XXXXXXXX: My Line No. (2) XX: 00-15◀: Service Restriction Class C
CM15	Allow Voice Call Mike Off (called side) in the Service Restriction Class C assigned by CM12 YY=07.	• YY=99 (1) 00-15 : Service Restriction Class C assigned by CM12 YY=07 (2) 0 : Available
CM20	Assign the Voice Call/Ring Tone Programming access code.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX : Access Code (2) A163 : Voice Call/Ring Tone Programming

END

INTERNAL ZONE PAGING WITH MEET-ME

Programming

To provide Internal Zone Paging with Meet-Me:

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A for Internal Zone Paging to the required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15 ◀: Service Restriction Class A
CM15	Allow Internal Zone Paging in the Service Restriction Class A assigned by CM12 YY=02.	• YY=49 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign Internal Zone Paging access codes and Meet-Me answer codes, as required.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: 50-54, 55-59: Access code (2) A130-A137: Group 0-7 (Paging Access) A138-A145: Group 0-7 (Meet-Me Answer)
CM56	Assign the D$^{\text{term}}$ into the required Internal Zone Paging Groups. **Note:** *A maximum of 8 internal zone paging is available. Up to 16 D$^{\text{term}}$s can be grouped per zone.*	• YY=00-07 Paging Group Number (1) 00-15: Serial No. in a Paging Group (2) X-XXXXXXXX: My Line No.
CM90	Assign Internal Zone Paging to each button on the D$^{\text{term}}$.	• YY=00 (1) X-XXXXXXXX: My Line No. + $\boxed{,}$ + Key No. (2) F1270 - F1277: Group 0-7
END		

To provide All Zone Internal Paging:

START	**DESCRIPTION**	**DATA**
CM08	Provide the system with All Zone Internal Paging.	(1) 158 (2) 1◀ : Available
CM12	Assign the Service Restriction Class A for All Zone Internal Paging to the required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow All Zone Internal Paging in the Service Restriction Class A assigned by CM12 YY=02.	• YY=49 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign an All Zone Internal Paging access code.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access code (1-4 digits) (2) A164: All Zone Internal Paging Access
CM56	Assign Group for Internal Zone Paging to the required D$^{\text{term}}$s. **Note:** *A maximum of 6 zones (0-5) internal paging groups are available. Up to 16 D$^{\text{term}}$s can be grouped per zone.*	• YY=00-05 Paging Group Number (1) 00-15: Serial No. in a Paging Group (2) X-XXXXXXXX: My Line No.
CM90	Assign an All Zone Internal Paging function key to a line button on the desired D$^{\text{term}}$s.	• YY=00 (1) X-XXXXXXXX: My Line No. + $\boxed{,}$ + Key No. (2) F1278: All Zone Internal Paging
END		

LAST NUMBER REDIAL

Programming

START

	DESCRIPTION	DATA
CM08	Provide the system with Last Number Redial.	(1) 177 (2) 0: Available
	Specify the capability for internal calls with this feature. If the data for CM08>178 is set to “0”, this feature will only be applied to outgoing calls.	(1) 178 (2) 0 : Not available 1◀ : Available
CM20	Assign the access code for Last Number Redial.	• Y=0-3 Numbering Plan Group 0-3 (1) X - XXXX: Access Code (**) (2) A069
CM90	Assign the Last Number Redial or Stack Dial feature access key to each D^{term}, as required. **Note**	• YY=00 (1) My Line No. + $\boxed{,}$ +Key No. (2) F0069: Last Number Redial F1000: Stack Dial
	Assign the Last Number Redial/Stack Dial key to each ATTCON/DESKCON, as required. **Note**	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6121: Last Number Redial/Stack Dial

END

Note: *Refer to Page 429 for details on programming STACK DIAL.*

LEAST COST ROUTING-3/6 DIGIT

Programming

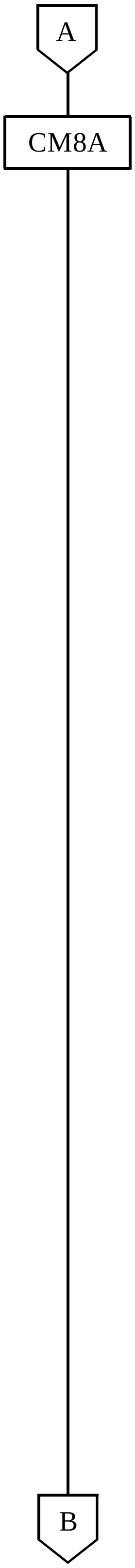
START

	DESCRIPTION	DATA
CM20	Assign the access code for LCR Group 0-2.	• Y=0-3 Number Plan Group 0-3 (1) X-XXXX: Access Code (2) A126: LCR Group 0 A127: LCR Group 1 A128: LCR Group 2
CM81	Assign the Toll Restriction Patterns with eight kinds of Trunk Restriction Classes assigned by CM12 YY=01. Toll Restriction Pattern 00-15 are preassigned as shown below. If a new Restriction Pattern is required, change the data for Restriction Pattern 01-13 (00, 14 and 15 are fixed).	• YY=01-13 Toll Restriction Pattern No. 01-13 (1) 1-8: Trunk Restriction Class (2) 0: Restricted 3: Allowed

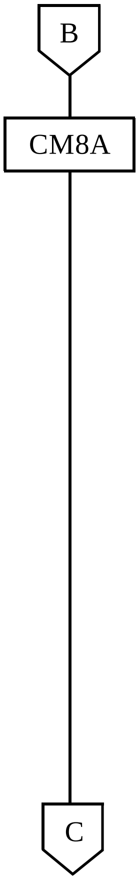
TRUNK RESTRICTION CLASS		Y															
		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	00
		TOLL RESTRICTION PATTERN NUMBER ON EACH TRUNK RESTRICTION CLASS															
		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	00
1	RCA	3	0	3	3	3	0	0	0	3	3	3	3	3	0	3	0
2	RCB	3	0	3	3	0	0	0	0	3	3	0	0	0	0	3	0
3	RCC	3	0	3	0	0	0	0	0	3	0	0	0	0	0	3	0
4	RCD	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
5	RCE	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
6	RCF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
7	RCG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
8	RCH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0

0: Restricted
3: Allowed

A



DESCRIPTION	DATA
Assign an Area Code Development Pattern number to each LCR Group.	• YYYY=A000 (1) 0-2: LCR Group 0-2 (2) 4005-4007:Area Code Development Pattern No. 5-7
Assign a Route Pattern number to each area code for the Area Code Development Pattern number assigned by CM8A YYYY=A000.	• YYYY=4005-4007 Area Code Development Pattern No. 5-7 (1) X...X: Area Code, Max. 8 digits (2) 0000-0255 : Route Pattern No. 000-255
Specify the order of LCR selection for the Route Pattern number assigned by CM8A YYYY=4005-4007.	• YYYY=0000-0255 Route Pattern No. 000-255 (1) 1-4: Order of LCR Selection 1: 1st 2: 2nd 3: 3rd 4: 4th (2) XXX ZZ XXX : 000-255: LCR Pattern No. 000-255 ZZ : 00-63: Trunk Route No. 00-63
For area code deletion, designate the digits to be deleted.	• YYYY=5000-5255 LCR Pattern No. 000-255
To delete all digits of the area code.	(1) 152 : Deletion of all digits of the area code assigned by CM8A YYYY=4005-4007 (2) 0 : To delete
To delete the designated digit of an area code assigned by CM8A YYYY=4005-4007.	• YYYY=5000-5255 (1) 153 : Designation of digit to be deleted for area code assigned by CM8A YYYY=4005-4007 (2) 00 : No digit deletion 01-10 : First digit deleted -First 10 digits deleted CCC : No digit deletion



DESCRIPTION	DATA
For area code addition, designate the digits to be added.	• YYYY=5000-5255 (1) 100 : Designation of digit Addition Pattern No. (2) 9000-9255: Digit Addition Pattern No. 000-255 CCC : No digit addition • YYYY=9000-9255 Digit Addition Pattern No. 000-255 (1) 0 (2) X-X...X : Digits to be added (Max. 32 digits) X =0-9, A (*), B (#), C (Fixed Pause)
If three-digit Toll Restriction is provided, assign the Toll Restriction Pattern number to the LCR Pattern number.	• YYYY=5000-5255 LCR Pattern No. 000-255 (1) 000 (2) 00-15: Toll Restriction Pattern No. specified by CM81

C

DESCRIPTION | **DATA**

CM8A

If six-digit Toll Restriction is provided, assign the following data to the LCR Pattern number and set up the six-digit Toll Restriction Pattern Tables.

(1) Specify the Trunk Restriction Classes to which 6-digit Toll Restriction applies.

Example: $\underbrace{412}_{\text{Area Code}} - \underbrace{211}_{\text{Office Code}}$

RCA:	No restrictions	(three-digit TR)
RCB:	412-211 is allowed	(six-digit TR)
RCC:	412-211 is allowed	(six-digit TR)
RCD:	412 is restricted	(three-digit TR)
RCE:	412 is restricted	(three-digit TR)

- YYYY=5000-5255
  LCR Pattern No. 000-255

(1) 021-028: Trunk Restriction Class assigned by CM12 YY=01
021 : Unrestricted (RCA)
022 : Non-Restricted 1 (RCB)
023 : Non-Restricted 2 (RCC)
024 : Semi-Restricted 1 (RCD)
025 : Semi-Restricted 2 (RCE)
026 : Restricted 1 (RCF)
027 : Restricted 2 (RCG)
028 : Fully-Restricted 2 (RCH)
(2) 0 : 6-digit Toll Restriction Pattern
1◀ : 3-digit Toll Restriction Pattern as per first data =000

CM8A		
Y	**TRUNK RESTRICTION CLASS**	**DATA**
5000	021	1
	022	0
	023	0
	024	1
	025	1

(2) Assign the six-digit Toll Restriction Pattern number to the LCR Pattern number.

- YYYY=5000-5255

(1) 020
(2) 8000-8049: 6-digit Toll Restriction Pattern No. 00-49

(2) Assign the Office code (three-digits) and the availability to access the office code to the six-digit Toll Restriction Pattern number assigned by (2).

- YYYY=8000-8049
  6-digit Toll Restriction Pattern No. 00-49

(1) XXX: 3-digits of Office Code
(2) 0 : Restricted
1◀ : Allowed

D

D	DESCRIPTION	DATA
CM8A	If the prefix is to be added, assign the following data to the LCR Pattern number. (1) Assign the 6-digit Prefix Pattern number to the LCR Pattern number.	• YYYY=5000-5255 LCR Pattern No. 000-255 (1) 150 (2) 8050-8099: 6-digit Prefix Pattern No. 00-49 CCC : No Prefix
	(2) Assign the office code (three-digits) requiring the Prefix to the six-digit Prefix Pattern number.	• YYYY=8000-8049 (1) XXX :3-digit of Office Code (2) 1◀ :Allowed
CM85	Specify the maximum number of digits to be dialed by calling party. The maximum number of digits including the area codes should be assigned to each area code.	• Y=5-7 Area Code Development Pattern No. 5-7 assigned by CM8A YYYY=A000 (1) X-X...X :Area Code dialed, Max. 8 digits (2) 01-24◀ :1 digit-24 digits 25-79 :25 digits-79 digits
CM35	Provide the Toll Restriction feature to the required trunk routes.	• YY=11 (1) 00-63 :Trunk Route No. (2) 0 :To provide
	Specify route access capability for each restriction class.	• YY=51-58 (1) 00-63: Trunk Route No. (2) 0 : Restricted 1◀ : Allow
	Assign the Area Code Development Pattern number for Toll Restriction and Maximum Digit Analysis to each trunk route.	• YY=76 (1) 00-63: Trunk Route No. (2) 05-07: Area Code Development Pattern No. 5-7

END

To provide LCR with Time of Day Routing, add the following system data programming.

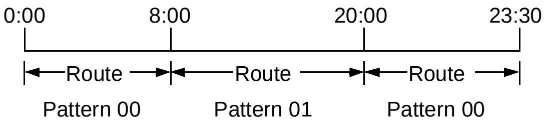
START	**DESCRIPTION**	**DATA**
CM8A	Assign the Date Pattern number to each area code for the Area Code Development Pattern number assigned by CM8A YYYY=A000.	• YYYY=4005-4007 Area Code Development Pattern No. 5-7 (1) X-X...X: Area Code Max. 8 digits (2) 3000-3003: Date Pattern No. 0-3
	Assign the Time Pattern number to each day of the week for the Date Pattern number assigned by CM8A YYYY=4005-4007.	• YYYY=3000-3003 Date Pattern No. 0-3 (1) 0: Sunday 1: Monday 2: Tuesday 3: Wednesday 4: Thursday 5: Friday 6: Saturday (2) 2000-2007: Time Pattern No. 0-7
A		

A

DESCRIPTION | **DATA**

CM8A

Assign the Route Pattern number to the required time of day for the Time Pattern number assigned by CM8A YYYY=3000-3003.
To define the following Time Pattern:



- YYYY=2000-2007 Time Pattern No. 0-7

(1) HH MM (Time)
HH : 00-23: Hours
MM : 00/30: Minutes
(2) 0000-0255: Route Pattern No. 000-255
If Tenant Pattern is required, set 1000-1015 (Tenant Pattern No. 00-15)

Y	TIME (1)	ROUTE PATTERN (2)
2000 (Time Pattern No. 0)	0000 0030 0100 0130 0200 0730 12:00 PM-8:00 AM	0000 (Route Pattern No. 000)
	2000 2030 2330 8:00 PM-12:00 PM	
2000 (Time Pattern No. 0)	0800 0830 1930 8:00 PM-8:00 PM	0001 (Route Pattern No. 001)

If the Tenant Pattern number is assigned by CM8A YYYY=2000-2007, assign the Route Pattern number to the required Tenant number for the Tenant Pattern number.

- YYYY=1000-1015 Tenant Pattern No. 00-15

(1) 00-63: Tenant No.
(2) 0000-0255: Route Pattern No. 000-255

END

To provide C.O. operator call with LCR, assign the following system data.

START	DESCRIPTION	DATA
CM20	Assign the access code for LCR Group 0.	• Y=0-3 Number Plan Group 0-3 (1) X-XXXX: Access Code (2) A126: LCR Group 0
CM81	Assign the Toll Restriction Patterns with eight kinds of Trunk Restriction Classes assigned by CM12 YY=01. Toll Restriction Pattern 00-15 is already programmed as shown below. If a new Restriction Pattern is required, change the data of the Restriction Pattern 01-13 (00, 14 and 15 are fixed).	• YY=01-13 Toll Restriction Pattern No. 01-13 (1) 1-8: Trunk Restriction Class (2) 0: Restricted 3: Allowed

TRUNK RESTRICTION CLASS		Y															
		01	**02**	**03**	**04**	**05**	**06**	**07**	**08**	**09**	**10**	**11**	**12**	**13**	**14**	**15**	**00**
		TOLL RESTRICTION PATTERN NUMBER ON EACH TRUNK RESTRICTION CLASS															
		01	**02**	**03**	**04**	**05**	**06**	**07**	**08**	**09**	**10**	**11**	**12**	**13**	**14**	**15**	**00**
1	RCA	3	0	3	3	3	0	0	0	3	3	3	3	3	0	3	0
2	RCB	3	0	3	3	0	0	0	0	3	3	0	0	0	0	3	0
3	RCC	3	0	3	0	0	0	0	0	3	0	0	0	0	0	3	0
4	RCD	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
5	RCE	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
6	RCF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
7	RCG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
8	RCH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0

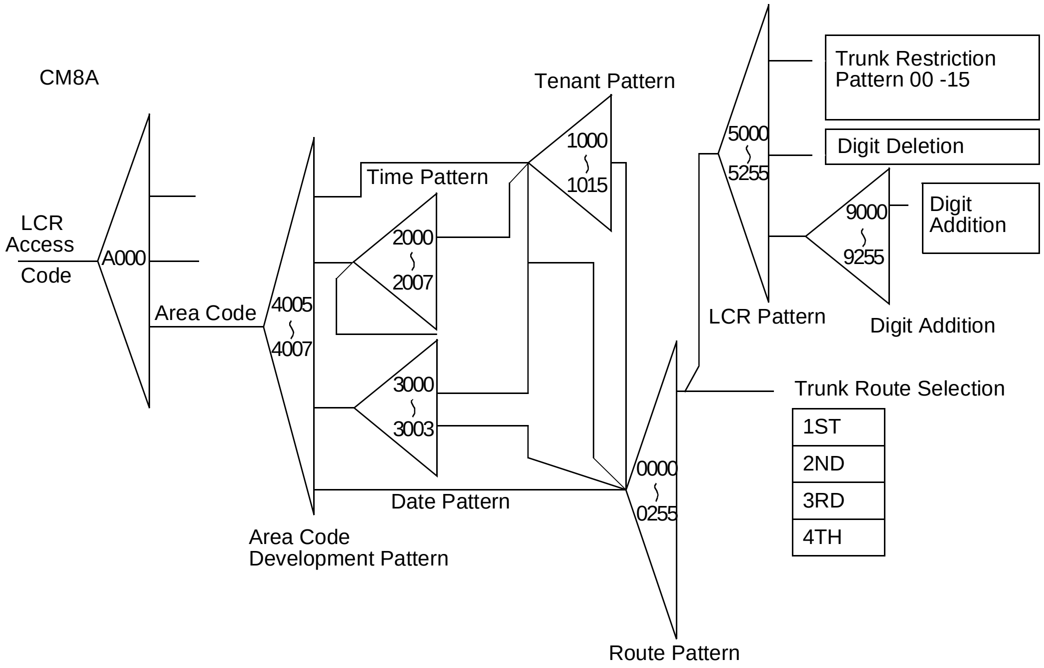
0: Restricted
3: Allowed

CM8A	Assign the Route Pattern number to each area code for the Area Code Development Pattern number assigned by CM8A YYYY=A000.	• YYYY=4010 Area Code for C.O. Operator (1) X-XXX: Area Code for C.O. Operator This data is only effective for an access code assigned to CM20>A126. (2) 000-063: Route Pattern No. 00-63
A		

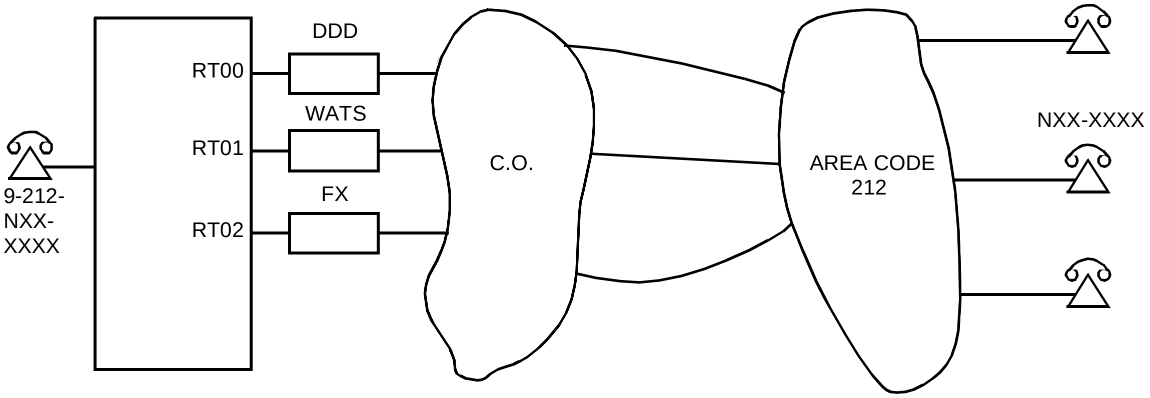
	DESCRIPTION	DATA
A		
CM8A	Assign the first order of LCR selection for the Route Pattern number assigned by CM8A YYYY=4010.	• YYYY=0000-0255 Route Pattern No. 000-255 (1) 1: First order of LCR selection (2) XXX ZZ XXX: 000-255: LCR Pattern No. ZZ : 00-63: Trunk Route No.
	Assign the Toll Restriction Pattern number to the LCR Pattern number assigned by CM8A YYYY=4010.	• YYYY=5000-5255 LCR Pattern No. 000-255 (1) 000 (2) 00-13, 15: Toll Restriction Pattern No. specified by CM81
END		

Note: *See the examples on the following pages.*

LCR Development Sequence



Example 1:



Conditions:

(1) Order of LCR Selection:
1st... Route 02 (FX)
2nd... Route 01 (WATS)
3rd... Route 00 (DDD)

(2) Dialed Number:
9 – 212 – NXX – XXXX

9 : Access Code
212 : Area Code
NXX : Office Code
XXXX : Telephone Number

(3) Toll Restriction Pattern:

CLASS ROUTE	RCA	RCB	RCC	RCD	RCE
00	–	–	–	–	–
01	–	–	–	×	×
02	–	–	×	×	×

– : Allowed
× : Restricted

Programming for Example 1:

Step 1: Assign “9” to the access code of LCR Group 0 in Numbering Plan Group 0.

$\boxed{\text{ST}}$ + 200 + $\boxed{\text{DE}}$ + 9 + $\boxed{\text{DE}}$ + A126 + $\boxed{\text{EXE}}$

Step 2: Assign Area Code Development Pattern No. 5 to LCR Group 0.

ST + 8AA000 + DE + 0 + DE + 4005 + EXE

Step 3: Assign Route Pattern No. 00 to area code (212) for Area code Development Pattern No. 5.

ST + 8A4005 + DE + 212 + DE + 0000 + EXE

Step 4: In Route Pattern No. 00, specify the order of LCR selection as shown below.
1st: Route 02 (FX)

ST + 8A0000 + DE + 1 + DE + 000 02 + EXE
└LCR Pattern No. 000

2nd: Route 01 (WATS)

ST + 8A0000 + DE + *2* + DE + 001 01 + EXE
└LCR Pattern No. 001

3rd: Route 00 (DDD)

ST + 8A0000 + DE + 3 + DE + 002 00 + EXE
└LCR Pattern No. 002

Step 5: In LCR Pattern No. 000 (for FX), delete the area code dialed.

ST + 8A5000 + DE + 151 + DE + 0 + EXE
└ LCR Pattern No. 000 └ To delete

Step 6: Assign the Toll Restriction Pattern to each Route (LCR Pattern No.).
For LCR Pattern No. 000 (Route 02):

ST + 8A5000 + DE + 000 + DE + 10 + EXE
└Toll Restriction Pattern No. specified by CM81.

For LCR Pattern No. 001 (Route 01):

ST + 8A5001 + DE + 000 + DE + 09 + EXE

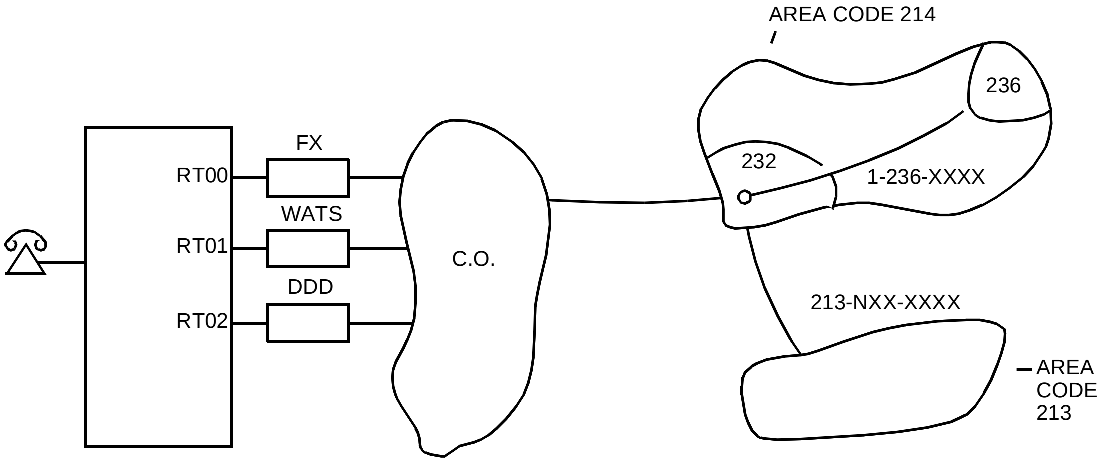
For LCR Pattern No. 002 (Route 00):

ST + 8A5002 + DE + 000 + DE + 01 + EXE

Step 7: Assign the maximum number of digits dialed.

ST + 855 + DE + 212 + DE + 10 + EXE
└ Area Code Development Pattern No. 5 └Area Code └10 digits (including the area code)

Example 2:



Conditions:

(1) Order of LCR Selection:
1st... Route 02 (FX)
2nd... Route 01 (WATS)
3rd... Route 00 (DDD)

(2) Dialed Number:
•9-214-232/236-XXXX

Note: *236 is a Toll Office.*

•9-213-NXX-XXXX

(3) Toll Restriction Pattern:

CLASS / ROUTE	RCA	RCB	RCC	RCD	RCE
00	–	–	–	–	–
01	–	–	– **Note**	×	×
02	–	– **Note**	×	×	×

– : Allowed
× : Restricted

Note: *Area Code 213 is restricted.*

Programming for Example 2:

Step 1: Assign “9” to the access code of LCR Group 0 in Numbering Plan Group 0.

$\boxed{\text{ST}}$ + 200 + $\boxed{\text{DE}}$ + 9 + $\boxed{\text{DE}}$ + A126 + $\boxed{\text{EXE}}$

Step 2: Assign Area Code Development Pattern No. 5 to LCR Group 0.

$\boxed{\text{ST}}$ + 8AA000 + $\boxed{\text{DE}}$ + 0 + $\boxed{\text{DE}}$ + 4005 + $\boxed{\text{EXE}}$

Step 3: Assign Route Pattern Nos. 00 and 01to area codes 214 and 213 respectively.

$\boxed{\text{ST}}$ + 8A4005 + $\boxed{\text{DE}}$ + 214 + $\boxed{\text{DE}}$ + $\underline{0000}$ + $\boxed{\text{EXE}}$
└ Route Pattern No. 00

$\boxed{\text{ST}}$ + 8A4005 + $\boxed{\text{DE}}$ + 213 + $\boxed{\text{DE}}$ + $\underline{0001}$ + $\boxed{\text{EXE}}$
└ Route Pattern No. 01

Step 4: Specify the order of LCR selection to each Route Pattern.

For Route Pattern 00:

1st: Route 00 (FX)

$\boxed{\text{ST}}$ + 8A0000 + $\boxed{\text{DE}}$ + 1 + $\boxed{\text{DE}}$ + $\underline{000}$ 00 + $\boxed{\text{EXE}}$
└LCR Pattern No. 000

2nd: Route 01 (WATS)

$\boxed{\text{ST}}$ + 8A0000 + $\boxed{\text{DE}}$ + 2 + $\boxed{\text{DE}}$ + $\underline{001}$ 01 + $\boxed{\text{EXE}}$
└LCR Pattern No. 001

3rd: Route 02 (DDD)

$\boxed{\text{ST}}$ + 8A0000 + $\boxed{\text{DE}}$ + 3 + $\boxed{\text{DE}}$ + $\underline{002}$ 02 + $\boxed{\text{EXE}}$
└LCR Pattern No. 002

For Route Pattern 01:

1st: Route 00 (FX)

$\boxed{\text{ST}}$ + 8A0001 + $\boxed{\text{DE}}$ + 1 + $\boxed{\text{DE}}$ + $\underline{003}$ 00 + $\boxed{\text{EXE}}$
└LCR Pattern No. 003

2nd: Route 01 (WATS)

$\boxed{\text{ST}}$ + 8A0001 + $\boxed{\text{DE}}$ + 2 + $\boxed{\text{DE}}$ + $\underline{004}$ 01 + $\boxed{\text{EXE}}$
└LCR Pattern No. 004

3rd: Route 02 (DDD)

$\boxed{\text{ST}}$ + 8A0001 + $\boxed{\text{DE}}$ + 3 + $\boxed{\text{DE}}$ + $\underline{005}$ 02 + $\boxed{\text{EXE}}$
└LCR Pattern No. 005

TOLL RESTRICTION

AREA CODE	ROUTE PATTERN No.	ORDER OF LCR	ROUTE	LCR PATTERN No.	RCA	RCB	RCC	RCD	RCE
214	00	1st	00	000	–	–	–	–	–
		2nd	01	001	–	–	–	×	×
		3rd	02	002	–	–	×	×	×
213	01	1st	00	003	–	–	–	–	–
		2nd	01	004	–	–	×	×	×
		3rd	02	005	–	×	×	×	×

–: Allowed

×: Restricted

Step 5: In LCR Pattern Nos. 000 and 003, delete the area code dialed.

$\boxed{\text{ST}}$ + $\underline{\text{8A5000}}$ + $\boxed{\text{DE}}$ + 151 + $\boxed{\text{DE}}$ + $\underline{0}$ + $\boxed{\text{EXE}}$

└LCR Pattern No. 000 └ To be deleted

$\boxed{\text{ST}}$ + $\underline{\text{8A5003}}$ + $\boxed{\text{DE}}$ + 151 + $\boxed{\text{DE}}$ + $\underline{0}$ + $\boxed{\text{EXE}}$

└LCR Pattern No. 003 └ To be deleted

Step 6: Assign the Toll Restriction Pattern to each LCR Pattern No. For LCR Pattern No. 000:

$\boxed{\text{ST}}$ + $\underline{\text{8A5000}}$ + $\boxed{\text{DE}}$ + 000 + $\boxed{\text{DE}}$ + $\underline{01}$ + $\boxed{\text{EXE}}$

└LCR Pattern No. 000 └Toll Restriction Pattern No. specified by CM81.

For LCR Pattern No. 001:

$\boxed{\text{ST}}$ + 8A5001 + $\boxed{\text{DE}}$ + 000 + $\boxed{\text{DE}}$ + 03 + $\boxed{\text{EXE}}$

For LCR Pattern No. 002:

$\boxed{\text{ST}}$ + 8A5002 + $\boxed{\text{DE}}$ + 000 + $\boxed{\text{DE}}$ + 04 + $\boxed{\text{EXE}}$

For LCR Pattern No. 003:

$\boxed{\text{ST}}$ + 8A5003 + $\boxed{\text{DE}}$ + 000 + $\boxed{\text{DE}}$ + 01 + $\boxed{\text{EXE}}$

For LCR Pattern No. 004:

$\boxed{\text{ST}}$ + 8A5004 + $\boxed{\text{DE}}$ + 000 + $\boxed{\text{DE}}$ + 04 + $\boxed{\text{EXE}}$

For LCR Pattern No. 005:

$\boxed{\text{ST}}$ + 8A5005 + $\boxed{\text{DE}}$ + 000 + $\boxed{\text{DE}}$ + 05 + $\boxed{\text{EXE}}$

Step 7: In LCR Pattern No. 000, designate the prefix “1”, in addition to the office code 236, by the six-digit Prefix Pattern.

- Designation of 6-digit Prefix Pattern No.

$$\boxed{\text{ST}} + \text{8A5000} + \boxed{\text{DE}} + 150 + \boxed{\text{DE}} + \underbrace{\underline{8050}}_{\text{6-digit Prefix Pattern No. 00}} + \boxed{\text{EXE}}$$

- Designation of office code requiring Prefix Pattern.

$$\boxed{\text{ST}} + \text{8A}\underbrace{\underline{8000}}_{\text{6-digit Prefix Pattern No. 00}} + \boxed{\text{DE}} + 236 + \boxed{\text{DE}} + 1 + \boxed{\text{EXE}}$$

Step 8: Assign the maximum number of digits dialed.

$$\boxed{\text{ST}} + 85\underbrace{\underline{5}}_{\text{Area Code Development Pattern No. 5}} + \boxed{\text{DE}} + \underbrace{\underline{21}}_{\text{Area Code}} + \boxed{\text{DE}} + \underbrace{\underline{10}}_{\text{10 digits}} + \boxed{\text{EXE}}$$

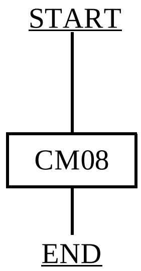
LINE LOCKOUT

Programming

START	DESCRIPTION	DATA
CM08	Provide the system with Howler Tone sent to locked-out stations, if required.	(1) 153 (2) 0: Not sent 1◀ : Sent
	Assign the line lockout indication on the DSS Console.	(1) 274 (2) 0: Available 1◀ : Not available
CM13	When the Howler Tone is provided (CM08>153=1), assign Howler Tone sending to required stations.	• YY=04 (1) X-XXXXXXXX: Station No. (2) 1◀ : To provide
CM42	Specify the number of stations in Line Lockout to give a MN Alarm.	(1) 01 (2) 01-99: Number of Stations in Line Lockout If no data is set, no Lockout Alarm Display functions.
END		

LINE PRESELECTION

Programming

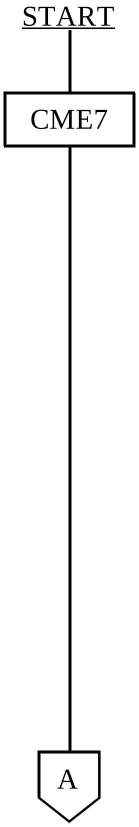


DESCRIPTION	DATA
Specify the operation of Line Preselection on a D$^{\text{term}}$.	(1) 199 (2) 0 : Only desired line key 1◀ : Speaker key is required after pressing the desired line key

MAINTENANCE ADMINISTRATION TERMINAL (MAT)

Programming

To provide password service for the MAT:



DESCRIPTION	DATA
Specify the command codes accessible to each Password Level.	• YY=00: Password Level 0-6 • YY=01: Password Level 1-6 • YY=02: Password Level 2-6 • YY=03: Password Level 3-6 • YY=04: Password Level 4-6 • YY=05: Password Level 5-6 • YY=06: Password Level 6 • YY=10: Password Level 0 • YY=11: Password Level 1 • YY=12: Password Level 2 • YY=13: Password Level 3 • YY=14: Password Level 4 • YY=15: Password Level 5 • YY=16: Password Level 6 (2) 02-F8: Command Code exclusive of 03, E7, E9 (2) 0 : Allowed 1◀ : Restricted

	DESCRIPTION	DATA
A		
CME9	Assign a password to each Password Level.	(1) 0-7: Password Level 0-7 (2) X-X...X: Max. 8 digits Password Code A password code for Password Level 7 should be assigned in advance because of providing the password service by CME9>9. The following passwords are not available: "CCCCCCCC" "FFFFFFFF"
	Provide the system with Password Feature. After setting this data, access to system programming is only available with password entry.	(1) 9 (2) 0: Provided
END		

Note: *If the Password Service is provided, enter a password predetermined by CM03 before programming from the MAT.*

ST + 03 + DE + Password Level No. (0-7) + DE + Password + EXE

- *"OK" will be displayed, if accepted.*

- *"DATA ERROR" will be displayed if the password is incorrect.*

Hardware Required

Refer to the MATWorX Studio User's Guide.

Fault Report Scheduling

Programming

Refer to the Maintenance Manual.

Passwords

Programming

START	DESCRIPTION	DATA
CME7	Specify the command codes accessible to each Password Level.	• Y=0: Password Level 0-6 • Y=1: Password Level 1-6 • Y=2: Password Level 2-6 • Y=3: Password Level 3-6 • Y=4: Password Level 4-6 • Y=5: Password Level 5-6 • Y=6: Password Level 6 (1) XX: 02-F8: Command Codes exclusive of 03, E7, E9 (2) 0 : Allow 1 : Assigned NONE◀ : Restricted
CME9	Assign a password to each Password Level.	(1) 0-7: Password Level 0-7 (2) X-X...X: Max. 8 digits Password Code A password code for Password Level 7 should be assigned in advance because of providing the password service by Function No. 9 of CME9. The following passwords are not available. "CCCCCCCC" "FFFFFFFF"
	Provide the system with Password feature. After setting this data, access to system programming will be available with password entry.	(1) 9 (2) 0: Provided
END		

Peg Count

Programming

Refer to the Command Manual. (CMB0, CMB3)

Remote Maintenance

Programming

Refer to the Maintenance Manual.

Remove And Restore Service

Programming

START	DESCRIPTION	DATA
CME5	Set or cancel make-busy to stations and trunks.	• Y=0 (1) X-XXXXXXXX: Station No. (2) 0 : Make-busy set 1◀ : Make-busy cancel • Y=1 (1) 000-255: Trunk No. (2) 0 : Make-busy set 1◀ : Make-busy cancel
END		

Station Line Status Display

Programming

Refer to the Maintenance Manual.

Station/Trunk Status

Programming

Refer to the Maintenance Manual.

MESSAGE CENTER INTERFACE (MCI)

System Outline

The Message Center Interface (MCI) provides an interface with a customer supplied Voice Mail System (VMS) which can send Message Waiting lamp control data to the PBX.

The MCI can provide the following operations.

- Incoming call information is sent to the VMS when a call terminates to the VMS.
- Control of Message Waiting lamps is based on information sent from the VMS.

The MCI interface is a half duplex EIA-RS232C asynchronous data link that operates under a specific message protocol and format.

The PBX can provide two kinds of MCI. One is the RS-232C interface on the MP card, and the other is the RS-232C interface on the AP00 card.

The system outline of the MCI is shown below.

(1) MCI with MP

The Main Processor (MP) is required to make a data link with a customer supplied VMS and the analog line circuit (LC/AUC) to interface with the VMS.

- MP card:

  The MP stores call information for stations, and provides the RS-232C ports for a VMS.

  The MP keeps supervising the status of the VMS. If the VMS is not ready for information receiving (Busy Status), the MP temporarily stores the call information into its internal memory. The MP stores call information of a maximum of 15 calls.

- LC/AUC card:

  The LC/AUC is used for the VMS stations. The UCD or Station Hunting feature is usually provided with the VMS stations.

(2) MCI with AP00

The Application Processor (AP00) is required to make a data link with a customer supplied VMS and the analog line circuit (LC/AUC) to interface with the VMS.

- AP00 card:

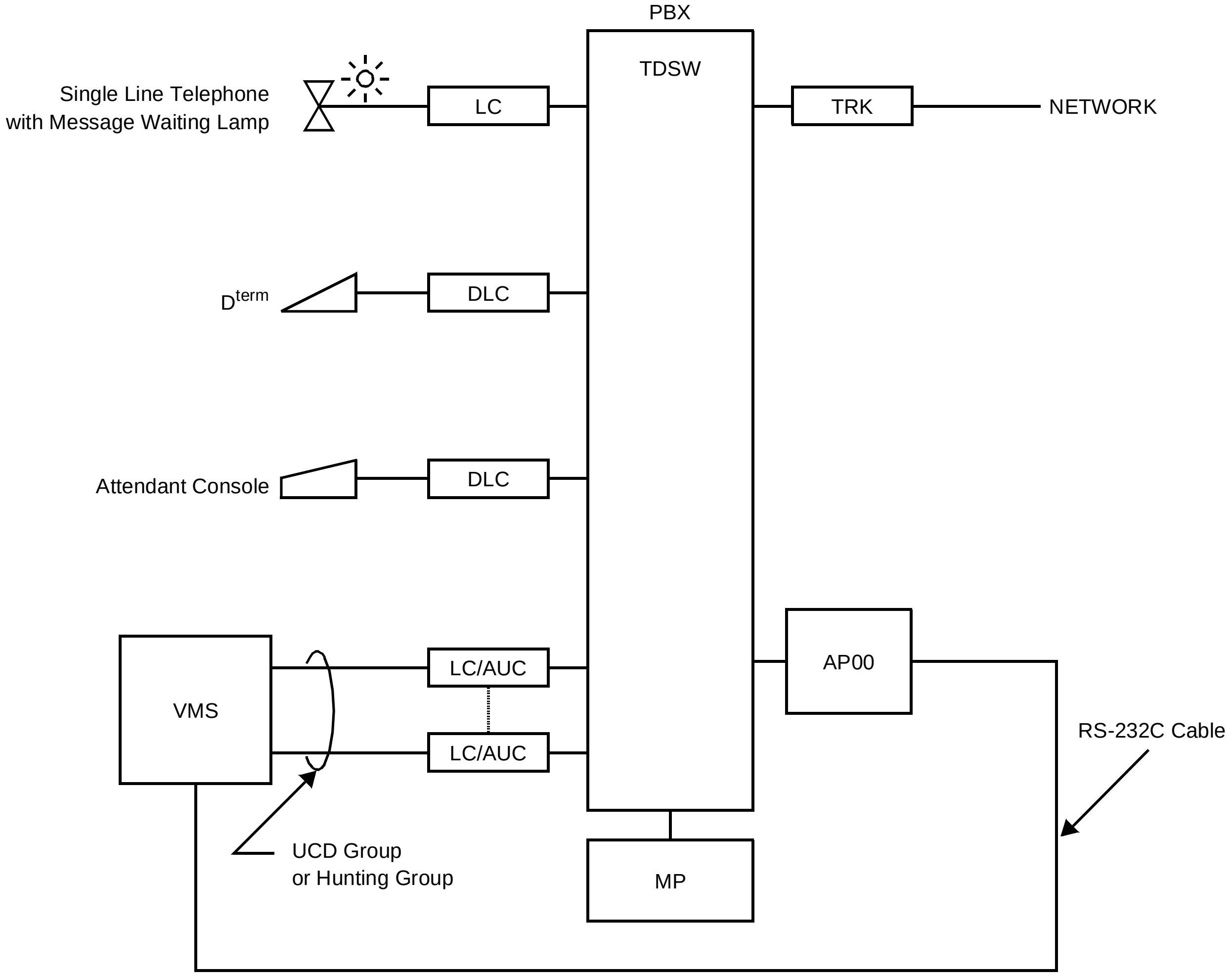
  The AP00 stores call information for stations, and provides the RS-232C ports for a VMS.

  The AP00 keeps supervising the status of the VMS. If the VMS is not ready for information receiving (Busy Status), the AP00 temporarily stores the call information into its internal memory. The AP00 stores call information of a maximum of 16 calls.

- LC/AUC card:

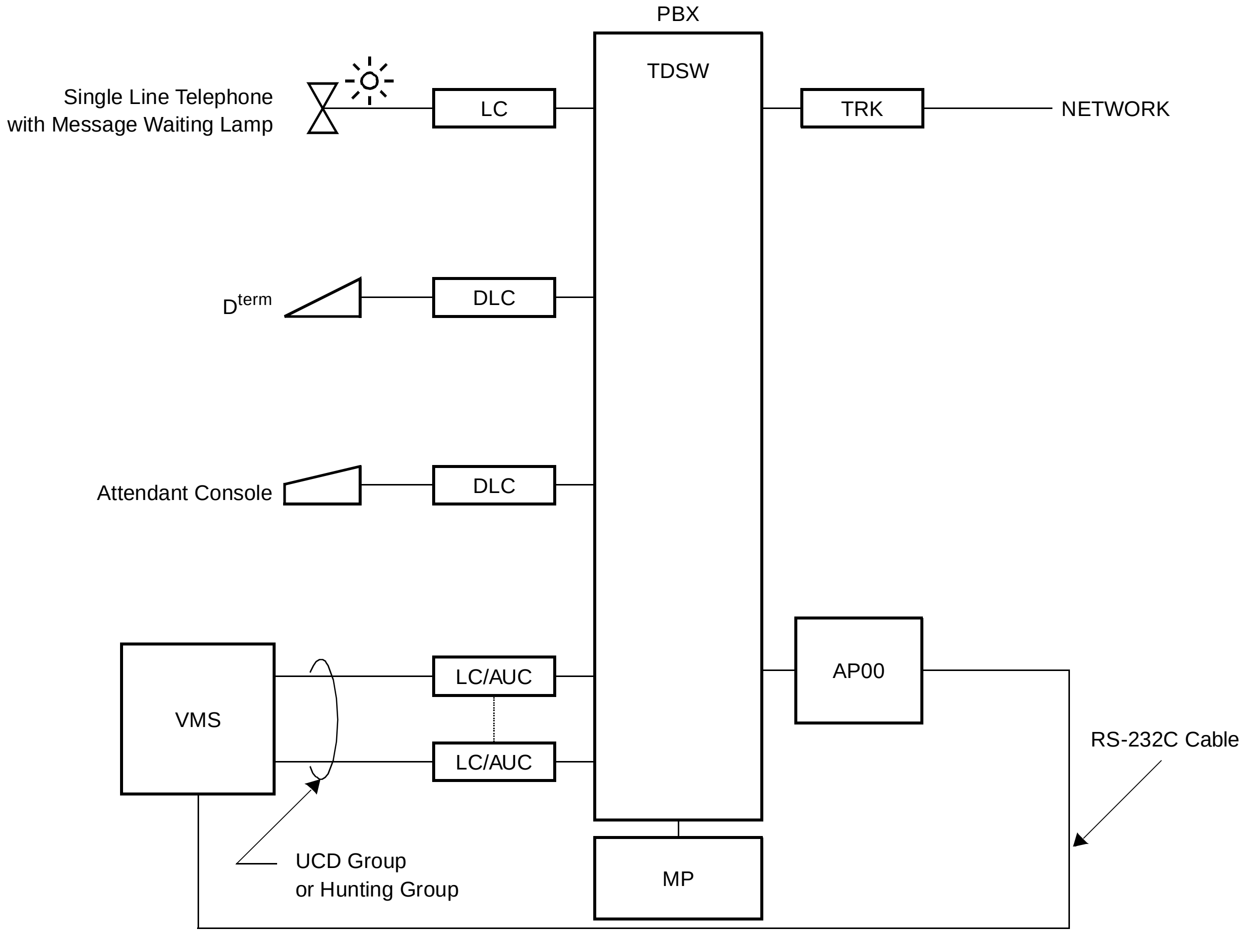
  The LC/AUC is used for the VMS stations. The UCD or Station Hunting feature is usually provided with the VMS stations.

System Outline of MCI with MP



DLC	: Digital Line Circuit Card
LC/AUC	: Analog Line Circuit Card
MP	: Main Processor Card
TRK	: COT, DTI, PRT, BRT Card
VMS	: Voice Mail System
TDSW	: Time Division Switch

System Outline of MCI with AP00



AP00 : MCI I/O Port Card
DLC : Digital Line Circuit Card
LC/AUC: Analog Line Circuit Card
MP : Main Processor Card
TRK : COT, DTI, PRT, BRT Card
VMS : Voice Mail System
TDSW : Time Division Switch

Hardware Required

(1) MCI with MP
MP card
LC/AUC card (for VMS station)
Single Line Telephone with MW lamp
8LC or 4LCD card
RS RVS-4S CA-A/RS RVS-15S CA-A or RS NORM-4S CA-A
Voice Mail System

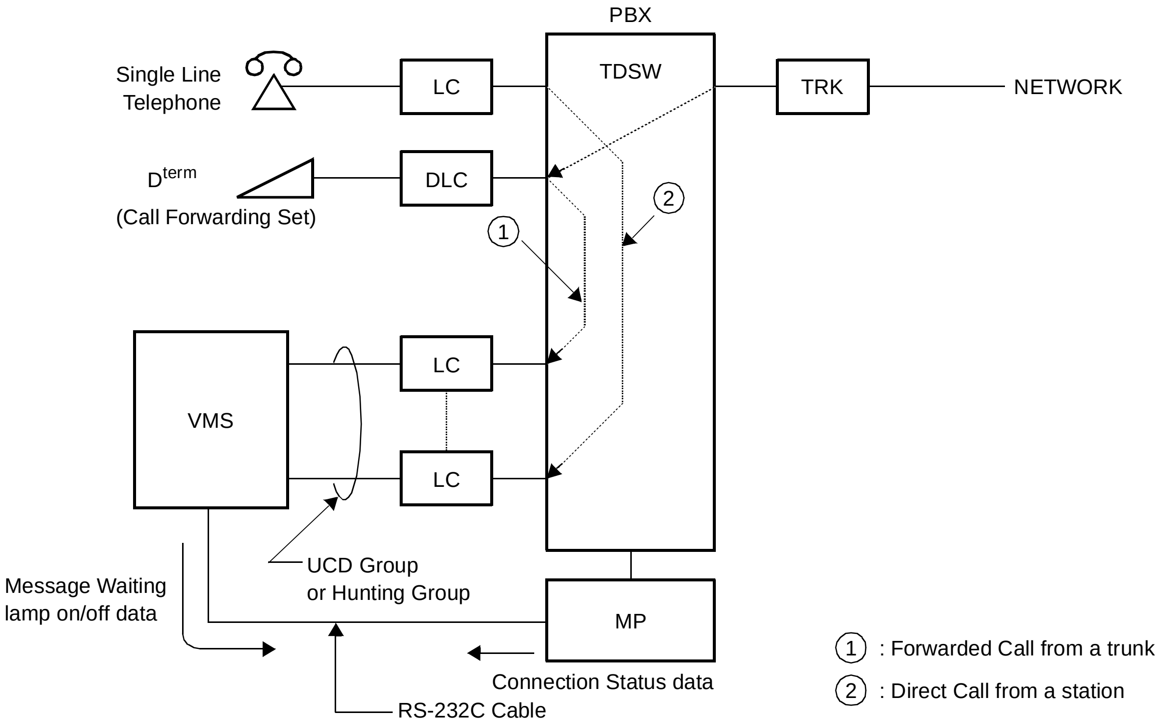
(2) MCI with AP00
AP00-B card
LC/AUC card (for VMS station)
Single Line Telephone with MW lamp
8LC or 4LCD card
RS RVS-4S CA-A/RS RVS-15S CA-A or RS NORM-4S CA-A
Voice Mail System

System Operation

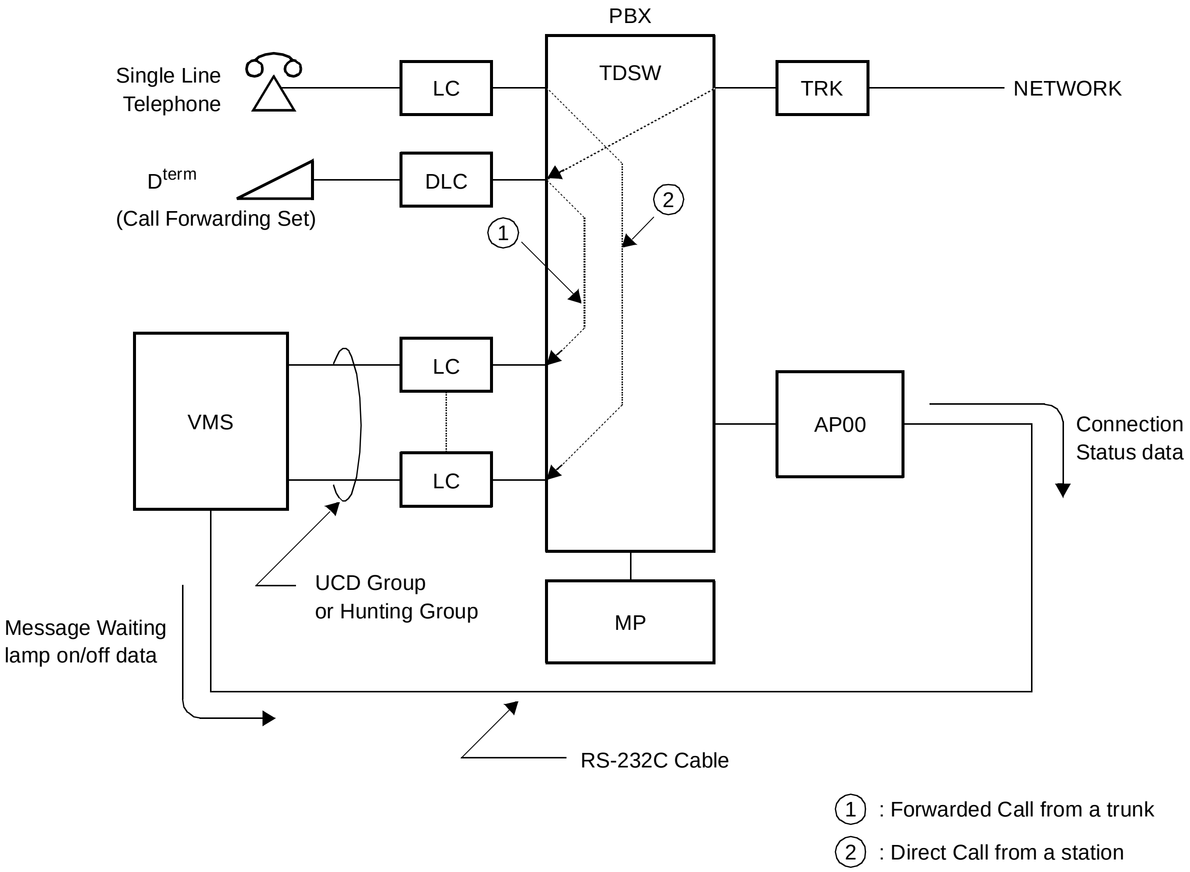
As shown below, a direct call or a forwarded call from a station/trunk/Attendant terminates to the VMS station in UCD group or Hunting group.

When the call is terminated to the VMS, the MP or the AP00 sends a call connection status information to the VMS through the MCI. If the ANI information is sent from the network, the ANI information can be added to the call connection status information by the system data programming (this feature is not available when the call is received from the CCIS trunk to the VMS). When the station/trunk/Attendant leaves a message in the VMS, the VMS sends a Message Waiting lamp ON data for the appropriate station through the PBX. After the station retrieves the messages, the VMS sends a Message Waiting lamp OFF data for the appropriate station through the PBX.

MCI System Operation (MCI with MP)

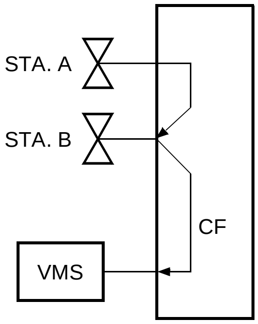
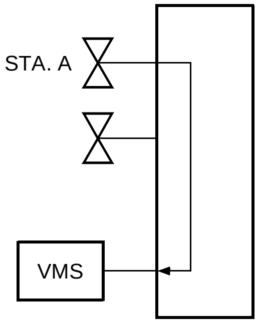
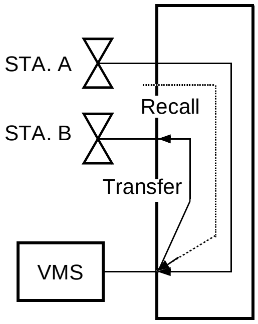

PBX
TDSW
Single Line Telephone
LC
TRK
NETWORK
Dterm
(Call Forwarding Set)
DLC
①
②
VMS
LC
LC
UCD Group or Hunting Group
Message Waiting lamp on/off data
MP
Connection Status data
RS-232C Cable
① : Forwarded Call from a trunk
② : Direct Call from a station

MCI System Operation (MCI with AP00)

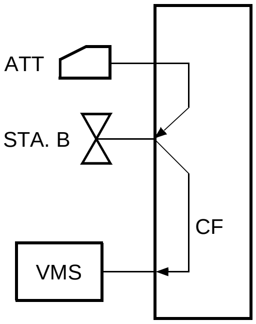
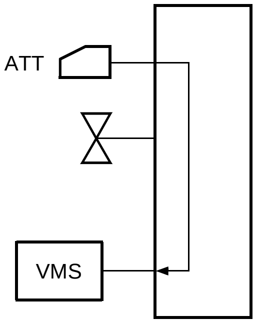
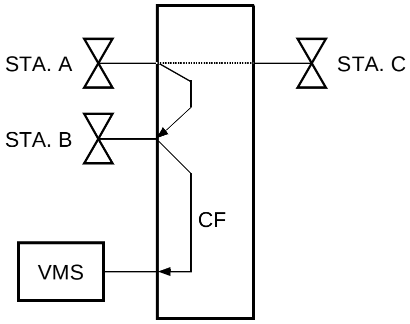

PBX
Single Line Telephone
LC
TDSW
TRK
NETWORK
Dterm
(Call Forwarding Set)
DLC
②
①
VMS
LC
LC
AP00
Connection Status data
UCD Group or Hunting Group
MP
Message Waiting lamp on/off data
RS-232C Cable
① : Forwarded Call from a trunk
② : Direct Call from a station

The connecting patterns to the VMS are as shown in the following pages.

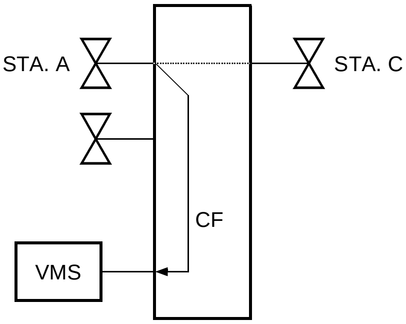
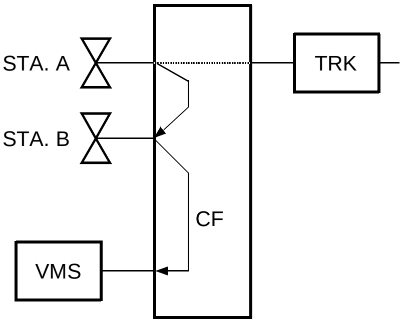
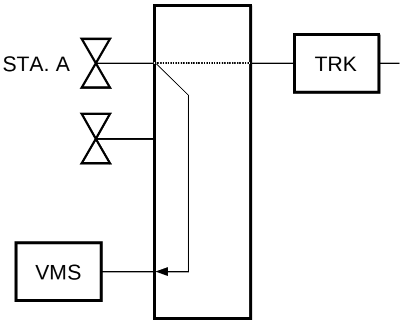
Connecting Patterns (1 of 6)

CALLING PARTY	CALLED PARTY	CONDITION OF CALL TERMINATION TO VMS	CONNECTING PATTERNS
STA. A	STA. B	STA. A calls STA. B set Forwarding – All Calls/Busy Line/No Answer to the VMS.	
STA. A	—	STA.A calls the VMS directly.	
STA. A	STA. B	After terminating a call from STA. A to the VMS and transferring the call to STA. B, STA. A recalls the VMS.	

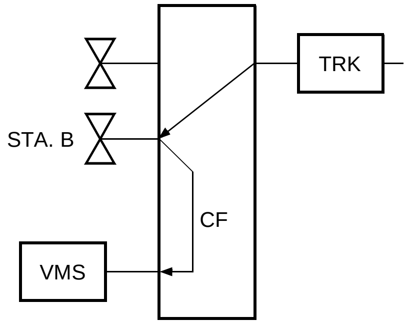
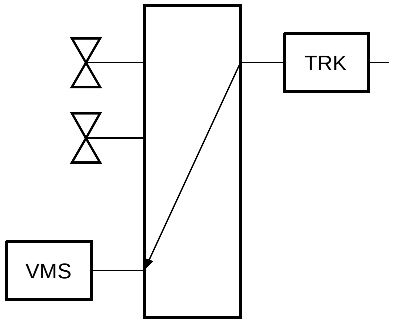
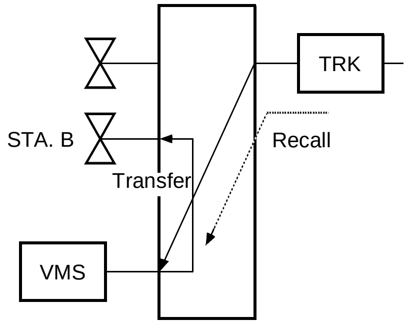
Connecting Patterns (2 of 6)

CALLING PARTY	CALLED PARTY	CONDITION OF CALL TERMINATION TO VMS	CONNECTING PATTERNS
ATT	STA. B	ATT calls STA. B set Call Forwarding – All Calls/Busy Line/No Answer to the VMS.	
ATT	—	ATT calls the VMS directly.	
STA. A	STA. B	After holding a call from STA. C, STA. A calls STA. B set Call Forwarding – All Calls/Busy Line/No Answer to the VMS.	

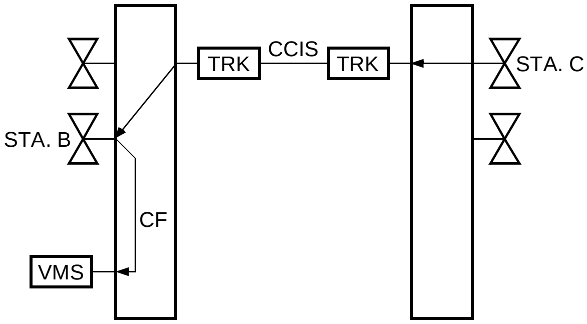
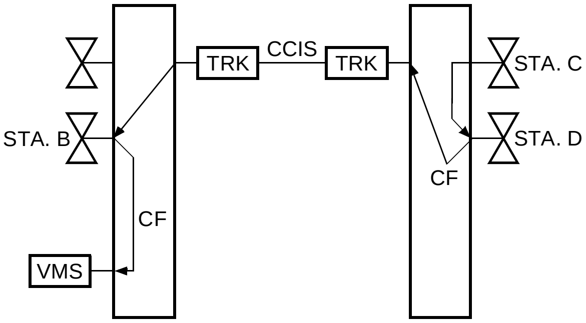
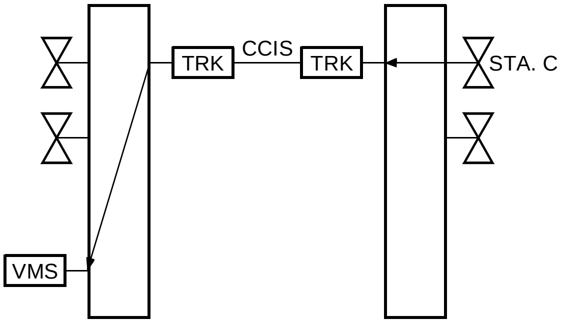
Connecting Patterns (3 of 6)

CALLING PARTY	CALLED PARTY	CONDITION OF CALL TERMINATION TO VMS	CONNECTING PATTERNS
STA. A	STA. C	After holding a call from STA. C, STA. A calls the VMS directly.	
STA. A	STA. B	After holding a call from TRK, STA. A calls STA. B set Call Forwarding – All Call/Busy Line/No Answer to the VMS.	
STA. A	TRK	After holding a call from TRK, STA. A calls the VMS directly.	

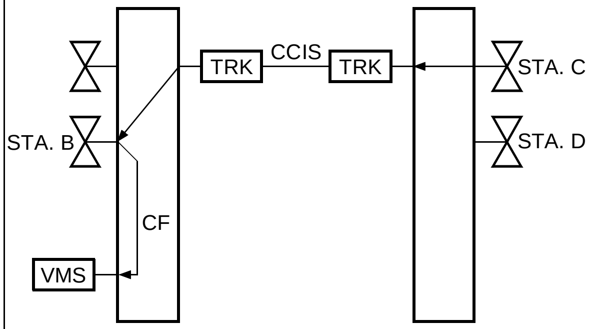
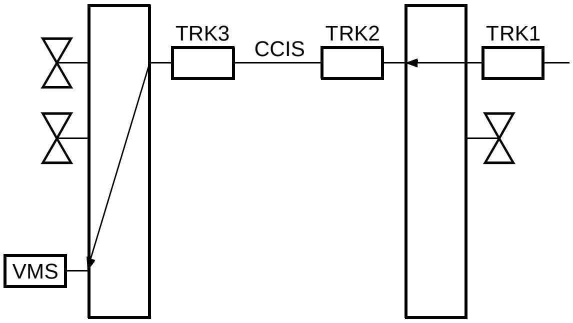
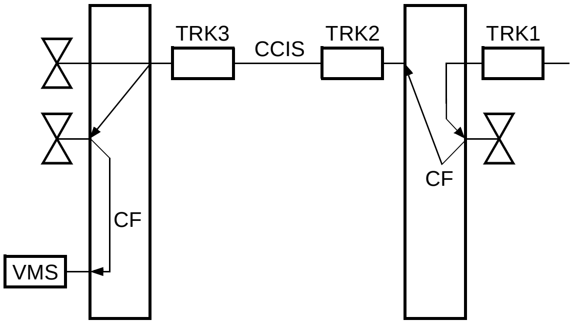
Connecting Patterns (4 of 6)

CALLING PARTY	CALLED PARTY	CONDITION OF CALL TERMINATION TO VMS	CONNECTING PATTERNS
TRK	STA. B	A TRK party calls STA. B set Call Forwarding – All Calls/ Busy Line/No Answer to the VMS.	
TRK	—	A TRK party calls the VMS directly.	
TRK	STA. B	After terminating a call from TRK to the VMS and transferring the call to STA. B, TRK recalls to the VMS.	

Connecting Patterns (5 of 6)

CALLING PARTY	CALLED PARTY	CONDITION OF CALL TERMINATION TO VMS	CONNECTING PATTERNS
STA. C	STA. B	In CCIS application, STA. C calls STA. B set Call Forwarding – All Calls/Busy Line/No Answer to the VMS.	
STA. C	STA. D	In CCIS application, STA. C calls STA. D set Call Forwarding – All Calls/Busy Line/No Answer to STA. B. (The call is forwarded to the VMS by the Multiple Call Forwarding).	 CCIS TRK TRK STA. C STA. B STA. D CF CF VMS
STA. C	—	In CCIS application, STA. C calls the VMS directly.	

Connecting Patterns (6 of 6)

CALLING PARTY	CALLED PARTY	CONDITION OF CALL TERMINATION TO VMS	CONNECTING PATTERNS
STA. C	STA. B	In CCIS application, after holding a call from STA. D, STA. C calls STA.B set Call Forwarding – All Calls/Busy Line/No Answer to the VMS.	 TRK CCIS TRK STA. C STA. B STA. D CF VMS
TRK1	—	In CCIS application, a TRK1 party dials the VMS directly.	
TRK1	STA. D	In CCIS application, a TRK1 party calls STA. D set Call Forwarding – All Calls/Busy Line/No Answer to STA. B. (The call is forwarded to the VMS by the Multiple Call Forwarding).	

When the PBX receives Message Waiting lamp control data from the VMS, the Message Waiting lamps of the called stations turn on or off. When the same Message Waiting lamp control data produces on D^{term}, the call indicator lamp on the D^{term} turns on and the “MSG” is displayed on the D^{term} as follows:

MSG
9:21 AM WED 8

Programming

Precaution

Before programming the system data for MCI, confirm that the system is under the following status.

- The system is under On-Line mode (“RUN” lamp is flashing on the MP card).
- The AP00 card is mounted in the correct location. (for MCI with AP00)
- All the system data pertaining to the station, trunks, and service features are already programmed.

Station Number Data Loading

The AP00 stores the station number data loaded from the MP. When station numbers have been added, deleted or changed by CM10, the station number data must be reloaded to the AP00 by the following procedure.

(1) Flip the MB switch of the AP00 to UP position.

(2) Return the MB switch to DOWN position.

(3) The “**** AP00 START ****” message is printed if a printer is provided.

(4) The “SORT COMPLETE” message is printed when the station number has been sent to the AP00.

AP Initialization

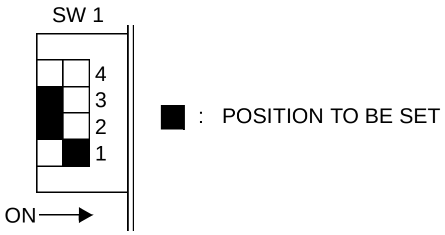
Note: *For MCI with MP, this programming is not required.*

This section explains the data assignment to make the AP active.

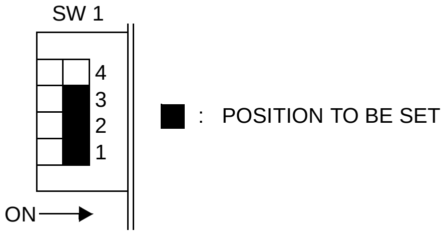
You can skip the data assignment explained on this section, if one of the following AP related feature has been activated; SMDR (Station Message Detail Recording), MCI (Message Center Interface), PMS (Property Management System), or Hotel printer. You can distinguish whether the AP is active or not by the RUN lamp indication. The RUN lamp flashes on green color when the AP is in active.

When you install the AP00 at first time, you should assign the data shown below.

	DESCRIPTION	DATA
START		
CM05	Assign an AP number to the AP00 card. The AP number must match the SENSE switch setting on the AP00 card. INITIAL	• Y=0 (1) 04-15, 20-31: AP No. (2) 04: AP00 card
	On the AP00 card, set SW1 switch as shown below.	SW1-4 should be set as follows; ON : The AP No. is 04-15 OFF: The AP No. is 20-31



	DESCRIPTION	DATA
CMD101	Load the initial data into the AP00 card. AP OFF LINE	(1) 0000 (2) CCC
	On the AP00 card, set the SW1 switch as shown below:	SW1-4 should be set as follows; ON : The AP No. is 04-15 OFF: The AP No. is 20-31
END		



MCI Programming

After AP Initialization, perform the following programming.

Call Forwarding to the VMS stations, and UCD Group/Station Hunting Group set to the VMS stations are required.

For programming these features, refer to each feature in this manual.

START	DESCRIPTION	DATA
CM08	Specify the type of VMS which is accommodated to the system. **[Series 2300 (R4.1) software required]** **Note:** *For VMS with MCI, set the 2nd data "0".*	(1) 443 (2) 0 : Depends on CM12 YY=25 1◀: VMS with DTMF
CM12	Specify the type of the VMS Station. **[Series 2300 (R4.1) software required]** **Note:** *CM12 YY=25 is effective only when CM08>443 is set to "0".*	• YY=25 (1) X-XXXXXXXX: Station No. (VMS station) (2) 0 : VMS with DTMF 3◀: VMS with MCI
CM08	Specify MSG display on the D$^{\text{term}}$.	(1) 025 (2) 0 : MSG (only) 1◀: MSG X (X: Number of message)
	Specify Message Waiting control from VMS with MCI to all stations. **Note:** *MW lamp control is only available to the stations in the opposite PBX connected with CCIS via MCI.* *Station dialing MW access codes are not allowed over CCIS.*	(1) 444 (2) 0 : Available 1◀: Not available
	Specify whether Message Waiting from the VMS is provided for the called station when a forwarded call is terminated to the VMS via CCIS.	(1) 376 (2) 0 : To provide 1◀: Not provided
A		

A

	DESCRIPTION	DATA
CM13	Provide Message Waiting for a station with MW lamp.	• YY=03 (1) X-XXXXXXXX: Station No. (2) 0: To provide
	Provide VMS service for a station port interface with the VMS (VMS station).	• YY=10 (1) X-XXXXXXXX: Station No. (VMS station) (2) 0: To provide
	Provide Momentary Open for a station port interface with the VMS (VMS station), as required.	• YY=22 (1) X-XXXXXXXX: Station No. (VMS station) (2) 0: To provide
CM90	Assign the data to provide the MW lamp on a D^{term}, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F1005
CM04	Assign the connection port for MCI. **(Series 2100 software required)**	• YY=01 (1) 01: Connection port for MCI (2) 0 : RS0 on MP 1 : RS1 on MP 7◀: AP00

B For MCI with MP on Page 339.

D For MCI with AP00 on Page 341.

- For MCI with MP **(Series 2100 software required)**

B

	DESCRIPTION	DATA
CM08	Assign the number of digits for station number in MCI message format sent to the VMS from the MP RS-232C port.	(1) 708 (2) 0 : 6 digits 1◀: 8 digits
CM40	Assign the function of RS-232C ports. **Note:** *When a port is used for MCI exclusively, assign the 2nd data =10.* *When a port is used for both MCI and Built-in SMDR, assign the 2nd data =11.*	• YY=00 (1) 0: Port 0 1: Port 1 (2) 10: MCI **Note** 11: MCI and Built-in SMDR **Note**
	Assign the attribute data, depending on the VMS.	• YY=01-06, 08 (1) See the following table. (2) See the following table.

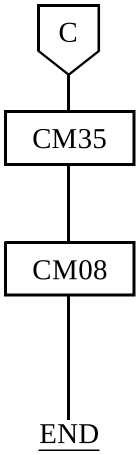
◀: Initial Data

Y		1ST DATA		2ND DATA	
NO.	**MEANING**	**DATA**	**PORT LOCATION NO.**	**DATA**	**MEANING**
01	Data length	0 1	Port 0 Port 1	0 1◀	7 bit 8 bit
02	Parity check	0 1	Port 0 Port 1	0 1◀	Effective Ineffective
03	Kind of parity	0 1	Port 0 Port 1	0 1◀	Even parity Odd parity
04	Stop bit	0 1	Port 0 Port 1	0 1◀	1-Stop bit 2-Stop bit
05	DTR signal sent to terminal	0 1	Port 0 Port 1	0 1◀	Low High
06	RTS signal sent to terminal	0 1	Port 0 Port 1	0 1◀	Low High
08	Data speed	0 1	Port 0 Port 1	1 2 3 4 5 NONE◀	1200 bps 2400 bps 4800 bps 9600 bps 19200 bps 9600 bps

Note: *The data should be assigned depending on the attribute of the VMS.*

C

To add ANI (Automatic Number Identification) information to the MCI message format when the ANI information is sent from the network, do the following programming.



DESCRIPTION	DATA
Provide sending of ANI information from network to the VMS with MCI.	• YYY=138 (1) 00-63: Trunk Route No. (2) 0: To send
For MCI with MP, specify the MCI message format sent to the VMS from the MP RS-232C port as Expanded (with ANI) format. **(Series 2100 software required)**	(1) 709 (2) 0: Expanded (with ANI)

- For MCI with AP00

D

DESCRIPTION	DATA
CMD000 Specify whether the text (Message Waiting control text sending is available) is sent to the VMS when the AP00 card is reset.	(1) 136 (2) 0◀: To send 1 : Not sent
Specify the number of digits for station number in the message format to communicate with the VMS.	(1) 137 (2) 0◀: 6 digits 1 : 8 digits
CMD001 Assign the attribute data, depending on the port (Port 0-3) connected to the VMS.	(1) See the following table. (2) See the following table.

AP00 INITIAL

FIRST DATA (1)				MEANING	SECOND DATA (2)	MEANING
PORT 0	PORT 1	PORT 2	PORT 3			
20	24	28	32	Data speed	2/3/4/5 **Note 1**	1200/2400/4800/9600 bps **Note 2**
21	25	29	33	Stop bit length	0◀/1/2	1/1.5/2 bits **Note 2**
22	26	30	34	Data length	0◀/1	7/8 bits **Note 2**
23	27	31	35	Parity	0◀/1/2	None Parity/Even Parity/ Odd Parity **Note 2**
80	100	120	140	Equipment Type	24	MCI
81	101	121	141	Priority for data processing	0◀	1st Priority
85	105	125	145	Station Address (SA)	48	0
86	106	126	146	Unit Address (UA)	33	!
89	109	129	149	Timer for detecting the end of block	5	512 msec.
98	118	138	158	Guard timer between texts	0◀ 1 2 3 4	0 ~ 128 msec. 128 ~ 256 msec. 256 ~ 384 msec. 384 ~ 512 msec. 512 ~ 640 msec. **Note 3**

Note 1: *For the Port 1 and Port 3, data speed 9600 bps cannot be set.*
Note 2: *This data should be assigned depending on the attribute of the VMS.*
Note 3: *To send the text to the VMS successively, assign the guard timer.*

E

To add ANI (Automatic Number Identification) information to the MCI message format when the ANI information is sent from the network, do the following programming.

	DESCRIPTION	DATA
E		
CM35	Provide sending of ANI information from network to the VMS with MCI.	• YYY=138 (1) 00-63: Trunk Route No. (2) 0: To send
CMD001	For MCI with AP00, specify the message format sent to the VMS with MCI as Expanded (with ANI) format.	(1) 36 (2) 1: Expanded (with ANI)
END		

MESSAGE REMINDER

Programming

To provide Message Reminder service for each station:

START	DESCRIPTION	DATA
CM08	Select MSG Display on D^{term}.	(1) 025 (2) 0 : MSG (only) 1◀ : MSGX (X: No. of messages)
	To activate Single-Digit Feature Access Code (1, 2, 3 and 6) feature, set the data for 050, 051, 069 and 148 to “1”. **Note:** *The single digit access code “6” is assigned as fixed to set Message Reminder.*	(1) 050: *Button as Switch Hook-Flash (2) 1◀ : Ineffective (1) 051: #Button as Switch Hook Flash (2) 1◀ : Ineffective (1) 069 : Single-Digit Dialing on BT Connection (2) 1◀ : Step Call (1) 148 : Same Last Digit Redialing on BT Connection (2) 1◀ : Ineffective
	Provide the system with Single-Digit Feature Access Code on RBT or Voice Call Connection.	(1) 156 (2) 0: Available
	Provide the system with Single-Digit Feature Access Code on busy Connection.	(1) 208 (2) 0: Available
	Provide the system with the automatic cancel of Message Reminder while the called station rings.	(1) 234 (2) 0 : Available 1◀ : Not available
	Specify the Automatic Cancel of Message Reminder when the desired station answers.	(1) 235 (2) 0 : Available 1◀ : Not available
	Specify the sending of Special Dial Tone for Attendant Console or station when dialing a feature access code.	(1) 236 (2) 0 : Tone is not sent 1◀ : Tone is sent
	Specify the time display for Message Reminder on D^{term} with LCD.	(1) 280 (2) 0 : 24-Hour 1◀ : 12-Hour
A	Specify Message Waiting Lamp indication on the station to which Message Reminder is set.	(1) 294 (2) 0 : Flashing (60 IPM) 1◀ : Steady Lighting

A	DESCRIPTION	DATA
CM13	Provide Message Reminder for each station.	• YY=03 (1) X-XXXXXXXX: Station No. (2) 0 : To provide (for stations with MW lamp or D^{term} with LCD) 1◀ : Not Provided
CM12	Assign the Service Restriction Class A for Message Reminder to required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Message Reminder in the Service Restriction Class A assigned by CM12 YY=02.	• YY=47 Message Reminder (Setting Side) • YY=48 Message Reminder (Set Side) (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for Message Reminder Search, Retrieve, Set, or Cancel.	• Y=0-3 Numbering Plan Group (0-3) (1) X-XXXX: Access Code (*9, #9) (2) A146: Message Reminder Search A147: Message Reminder Retrieve A148: Message Reminder Set A149: Message Reminder Cancel
CM90	Assign the MSG key to each D^{term}.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F1005
END		

Hardware Required

Single-Line Telephone with MW Lamp
8LC or 4LCD card

MESSAGE WAITING

Programming

Refer to the DSS/BLF Console feature to program the DSS/BLF as a Message Front Station.

START

DESCRIPTION / **DATA**

CM12

Assign the Service Restriction Class A for Message Waiting to required stations as shown below.

- YY=02
- (2) X-XXXXXXXX: Station No.
- (2) XX ZZ
  XX: 00-15◀: Service Restriction Class A

CM15

Allow Message Waiting in the Service Restriction Class A assigned by CM12 YY=02.

STATION/ADMINISTRATIVE	CM15 YY=24	CM15 YY=40
Station w/o MW Lamp	0	0
Station with MW Lamp	0	1
Administrative station	1	0

- YY=24 Administrative station allowing Message Waiting Set/Reset to station
- YY=40 Station setting MW
- (1) 00-15: Service Restriction Class A
- (2) 0 : Restricted
  1◀ : Allow

CM13

Provide each station with Message Waiting. (D^{term} or Single-Line Telephone with Message Waiting Lamp)

- YY=03
- (1) X-XXXXXXXX: Station No.
- (2) 0: To provide

CM20

Assign an Access Code for Message Waiting Set/Reset/Retrieve.

- Y=0-3 Numbering Plan Group 0-3
- (1) X-XXXX: Access Code
- (2) A040: MW Lamp Control Set
  A041: MW Lamp Control Reset
  A147: MW Retrieve

CM51

Assign the Message Front destination of the MW retrieve call from the station to which Message Waiting is set.
By pressing MW Retrieve access code or MW key on D^{term}, the call is routed to the destination.

- YY=15
- (1) 00-63: Tenant No. to which MW set D^{term} belongs
- (2) X-XXXXXXXX: Message Front Station No./My Line No.
  E000: Attendant Console

A

A

	DESCRIPTION	DATA
CM08	Assign the Lamp color on D^{term} when Message Waiting is set.	(1) 144 (2) 0 : Green 1◀ : Red
	Specify the Message Lamp Indication Pattern on D^{term}.	(1) 294 (2) 0 : Flashing (60 IPM) 1◀ : Steady Lighting
	If an Attendant Console is assigned as the Message Front destination by CM51 YY=15, set the data for 233 to 0. With this setting, Message Waiting is automatically reset when the attendant answers.	(1) 233 (2) 0: Available
	To reset Message Waiting indication while the Message Front station or attendant rings, set the data for 234 to 0.	(1) 234 (2) 0: Available
	To reset Message Waiting indication when the desired station answers a second call from the Message Front station or attendant, set the data for 235 to 0.	(1) 235 (2) 0: Available
CM90	Assign the Message Waiting function key to required D^{term} and the administrative stations.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) For administrative station F0040: Message Waiting Set F0041: Message Waiting Reset For set station without MW Lamp F1005: Message Waiting Lamp

B

B

	DESCRIPTION	DATA
CM90	Assign the Message Waiting key to ATTCON/ DESKCON.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6101: Message Waiting F6104: Reset
CM48	Select the Dial Tone on setting Message Waiting.	• Y=2 (1) 12: Dial Tone on setting Message Waiting (1) 0 : Special Dial Tone (Stutter Dial Tone) 1◀ : Dial Tone

END

Hardware Required

Single-Line Telephone with the MW Lamp
8LC or 4LCD card
D^{term} and DLC card, if required

MISCELLANEOUS TRUNK ACCESS

CCSA Access

Programming

In addition to the programming of Tie Lines, assign CCSA line to the required routes, as shown below.

START

	DESCRIPTION	DATA
CM35	Assign CCSA line to required routes.	• YY=00 (1) 00-63: Trunk Route No. (06) (2) 03: CCSA line
	Specify the ICI key, for Attendant Console, to which a CCSA incoming call from the CCSA network will terminate.	• YY=15 (1) 00-63: Trunk Route No. (2) ICI key 30-37: CCSA Incoming Call 0-7
CM90	Assign the ICI key to the ATTCON/ DESKCON, to which a CCSA incoming call will terminate.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + key No. (2) ICI key F6030-F6037:Call Termination from CCSA Line 0-7
CM20	Assign the CCSA access code.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (85) (2) 100-163: Trunk Route No. 00-63 (06)

END

Hardware Required

ODT card

Code Calling Equipment Access

Programming

START	DESCRIPTION	DATA
CM10	Assign the interface trunk (COT card and DK card) to the required LEN. **Note:** *The DK card number must be assigned to the first LEN (Level 0) and the third LEN (Level 2) of each LT Slot.*	(1) 000-763: LEN (2) D000-D255: COT card E800-E831 : DK card For PIM 0/1: E800-E807 For PIM 2/3: E808-E815 For PIM 4/5: E816-E823 For PIM 6/7: E824-E831 **Note:** *Circuit No. 3 of E831 is used for built-in External Equipment Interface of MP card by setting CM44.*
CM30	Assign the trunk data to the trunk number.	• YY=00 Trunk Route Allocation (1) 000-255: Trunk No. (2) 00-63: Trunk Route No. Dedicated route number for this service should be assigned. • YY=01 Tenant Allocation (1) 000-255: Trunk No. (2) 00-63: Tenant No.
CM35	Assign the route data to the trunk route specified by CM30 YY=00.	• YY=00 Kind of Route (1) 00-63: Trunk Route No. (2) 05 • YY=01 Type of Signal to be sent out (1) 00-63: Trunk Route No. (2) 2: DP 4: DTMF • YY=08 Dial Pulse Sending (1) 00-63: Trunk Route No. (2) 3◀ : To send
A		

A

	DESCRIPTION	DATA
CM44	Assign the paging function to the DK card.	(1) XX Y XX : 00-31: DK Card No. assigned by CM10 (E800-E831) Y : 0-3: Circuit No. of DK card 313 : Built-in External Equipment Interface of MP card (2) 02 XX: Zone assigned by CM30 YY=28 XX : 00-09: Speaker Paging Zone 0-9
CM20	Assign the access code for this service.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) 100-163: Trunk Route No. 00-63 assigned by CM30 YY=00

END

Note: *For assigning the Class of Service for this feature, refer to CLASS OF SERVICE on Page 149.*

Dictation Equipment Access

Programming

START

	DESCRIPTION	DATA
CM10	Assign the trunk number to the required LEN.	(1) 000-763: LEN (2) D000-D255: Trunk No.
CM30	Assign the trunk data to the trunk number.	• YY=00 Trunk route allocation (1) 000-255: Trunk No. (2) 00-63 : Trunk Route No. Dedicated route number for this service should be assigned. • YY=01 Tenant allocation (1) 000-255: Trunk No. (2) 00-63 : Tenant No.
CM35	Assign the route data to the trunk route specified by CM30 YY=00.	• YY=00 Kind of Route (1) 00-63: Trunk Route No. (2) 05 • YY=01 Type of Signal to be sent out (1) 00-63 : Trunk Route No. (2) 4 : DTMF • YY=08 Dial Pulse Sending (1) 00-63 : Trunk Route No. (2) 3◀ : To send
CM20	Assign the access code for this service.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX :Access Code (2) 100-163 :Trunk Route No. 00-63 assigned by CM30 YY=00

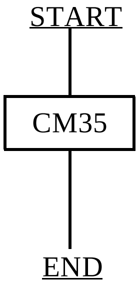
END

Note: *For assigning the Class of Service for this feature, refer to CLASS OF SERVICE on Page 149.*

Foreign Exchange Access

Programming

In addition to the programming of Direct Outward Dialing, assign an FX line to the required trunk routes as shown below:



DESCRIPTION	DATA
Assign an FX line to the required trunk route.	• YY=00 (1) 00-63: Trunk Route No. (2) 01: FX line

Note: *For assigning the Class of Service for this feature, refer to CLASS OF SERVICE on Page 149.*

Radio Paging Equipment Access

Programming

START	DESCRIPTION	DATA
CM10	Assign the interface trunk for Radio Paging Equipment to the required LEN.	(1) 000-763: LEN (2) D000-D255: Trunk No.
CM12	Assign the Service Restriction Class A for Paging Access to the required stations.	• YY=02 (2) (1) X-XXXXXXXX: My Line No. (2) (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Paging Access in the Service Restriction Class A assigned by CM12 YY=02.	• YY=08 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM41	Specify the timing for canceling the Paging Answer capability.	• Y=0 (1) 20 (2) 01-15: 60-900 sec. in 60 sec. increments If no data is set, the default setting is 300 seconds.
CM08	Specify the conditions for Radio Paging Access.	(1) 094 : Paging Access Tone (2) 0 : To send (1) 095 : Hooking Signal to Radio Paging Equipment (2) 0 : To send 1◀ : Not sent (1) 149 : Automatic Call Back when paging station is busy through non-delay operation (2) 0 : Available 1◀ : Not available (1) 157 : Access Code for Paging Access and Answer (2) 0 : Same 1◀ : Different (1) 162 : Multiple Radio Paging Access after accessing a radio paging trunk with delay type Radio Paging (2) 0 : Not available 1◀ : Available

A
When
CM08>157:1
(Different)

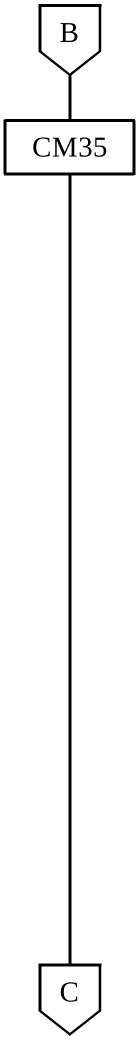
C
When
CM08>157:0
(Same)

A

	DESCRIPTION	DATA
CM20	Assign the access code for Paging Access and Answer.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) 100-163 :For Paging Access (Trunk Route 00-63) A070-A079:For Paging Answer (Paging Answer Zone 0-9)
CM30	Assign the data for Radio Paging to the desired trunk number.	• YY=00 Trunk Route Allocation (1) 000-255: Trunk No. (2) 00-63: Trunk Route No. • YY=28 Zone/Kind of Paging (1) 000-255: Trunk No. (2) X Z X : 0-9: Paging Answer Zone 0-9 Z : Kind of Paging 1 : No Answer 3 : Non-Delay Answer 5 : Non-Delay or Delay Answer 6 : No Answer and Automatic Dialing of Calling Party’s No.

B

DESCRIPTION	DATA



Assign the route data to the trunk route number assigned by CM30 YY=00.

- YY=00

(1) 00-63: Trunk Route No. (07)
(2) 05

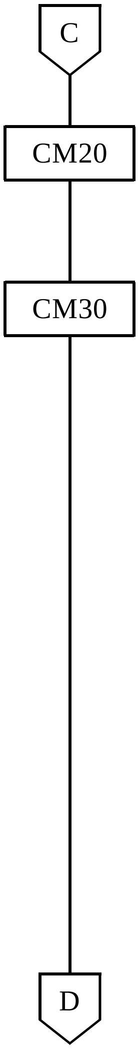
- YY=08 Dial Sending to Radio Paging Equipment

(1) 00-63: Trunk Route No.
(2) 3◀ : Dial pulses are sent out

- YY=13 Max. number of sending digits

(1) 00-63 : Trunk Route No.
(2) 000 : Only dialed No. is sent
001-004 : 1 digit-4 digits of Radio No. and calling station No.
005-254 : 2 digits of Radio Paging No. and calling station No.

Note: *To send a calling station No. automatically, the data for CM30 YY=28 must be set to “X6”.*



	DESCRIPTION	DATA
CM20	Assign the access code for each Paging Answer Zone.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A070-A079: Paging Answer Zone 0-9
CM30	Assign the data for Radio Paging to the trunk number, assigned by CM10, as follows: Paging Answer — Trunk Route 0 — 50 ≀ — ≀ 9 — 59	• YY=00 Trunk Route Allocation (1) 000-255: Trunk No. (2) 50-59: Trunk Route No. • YY=28 Zone/Kind of Paging (1) 000-255: Trunk No. (2) X Z X : 0-9: Paging Answer Zone 0-9 Z : Type of Paging 1 : No Answer 3 : Non-Delay 5 : Non-Delay or Delay Answer 6 : No Answer and Automatic Dialing of Calling Party’s No.

	DESCRIPTION	DATA
D		
CM35	Assign the route data to the trunk route number assigned by CM30 YY=00.	• YY=00 (1) 50-59: Trunk Route No. (2) 05 • YY=08 Dial Sending to Radio Paging Equipment (1) 50-59: Trunk Route No. (2) 3◀ : Dial pulses are sent out • YY=13 Max. number of sending digits (1) 50-59: Trunk Route No. (2) 000: Only dialed No. is sent 001-004: 1 digit-4 digits of Radio No. and calling station No. 005-254: 2 digits of Radio Paging No. and calling station No. **Note:** *To send a calling station No. automatically, the data for CM30 YY=28 must be set to "X6".*
END		

Hardware Required

COT card
Radio Paging Equipment provided locally

Wide Area Telephone Service (WATS) Access

Programming

In addition to the programming of Direct Outward Dialing, assign an WATS line to the required trunk route, as shown below:

	DESCRIPTION	DATA
START		
CM35	Assign a WATS line to the required trunk route.	• YY=00 (1) 00-63: Trunk Route No. (05) (2) 02: WATS line
END		

Note: *For assigning the Class of Service for this feature, refer to CLASS OF SERVICE on Page 149.*

MULTILINE TERMINAL ATTENDANT POSITION

Programming

START	DESCRIPTION	DATA
CM10	Assign the My Line number to the required LEN.	(1) 000-763: LEN (2) FX-FXXXX: My Line No.
CM12	Assign the Service Restriction Class B for the Attendant Position to the required D^{term}.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ ZZ: 00-15◀: Service Restriction Class B
CM15	Allow the Attendant Position in the Service Restriction Class B assigned by CM12 YY=02. **Note:** *The Service Restriction Class number for the Attendant Position should be different from an ordinary station.*	• YY=71 (1) 00-15: Service Restriction Class B assigned by CM12 YY=02 (2) 0: Attendant Position
CM11	Assign the required number of Loop, ICI (Incoming Call Identification) and OPR (Operator Call) lines to the Virtual LEN. **Note:** *Usually, ICI/OPR numbers are assigned on a per-Attendant-Position-Group.*	(1) 000-255: Virtual LEN (2) AA X Y: Loop Line No. X: 0-7: Attendant Position No. Y: 1-5: Loop No. AB00-AB99 : ICI/OPR Line No.
CM12	Assign each Loop Line number assigned by CM11 as an Attendant Loop Line.	• YY=03 (1) AA01-AA75: Loop Line No. assigned by CM11 (2) 08: Attendant Position Loop Line
	Assign the Service Restriction Class B for the ICI key to the required ICI/OPR line numbers assigned by CM11.	• YY=02 (1) AB00-AB99: ICI/OPR Line No. assigned by CM11 (2) XX ZZ ZZ: 00-15◀: Service Restriction Class B
CM15	Allow the ICI/OPE key in the Service Restriction Class B assigned by CM12 YY=02. **Note:** *The Service Restriction Class number for the Attendant Position should be different from an ordinary station.*	• YY=73 (1) 00-15 : Service Restriction Class B assigned by CM12 YY=02 (2) 0 : ICI/OPE key
A		

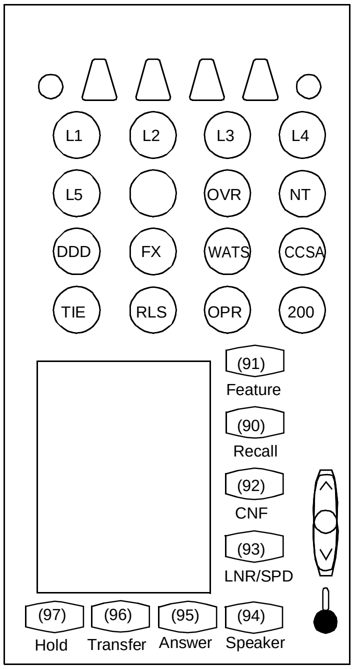
	DESCRIPTION	DATA
A		
CM12	Assign a Hotline station to each ICI/OPR line number. With this assignment, each ICI/OPR line is restricted from call origination.	• YY=03 (1) AB00-AB99: ICI/OPR No. (2) 04: Hotline
CM17	Assign a UCD station to each ICI/OPR line number. With this assignment, ICI/OPR lines are provided the call-queuing facility individually.	• Y=1 (1) AB00-AB99: ICI/OPR Line No. (2) 1: Pilot station • Y=2 (1) AB00-AB09: ICI/OPR Line No. (2) 00-15: UCD Group No. **Note:** *Individual UCD Group number must be assigned to each ICI/OPR Line number.*
CM20	Assign the access code for Priority Call 0 used for Attendant Position access.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Attendant Position Access Code (2) A088
CM51	Assign the destination of Priority Call 0 to each OPR line.	• YY=12 (1) 00-63: Tenant No. (2) AB00-AB99: OPR Line No.
CM08	Destination of Priority Call 0.	(1) 250 (2) 0: Same station as Off Hook Alarm
CM30	On the required trunks, assign the destination of DIT to each ICI line.	• YY=02 (1) 000-255: Trunk No. (2) 04: Direct-in Termination • YY=04 (1) 000-255: Trunk No. (2) AB00-AB99: ICI Line No.
CM08	Provide the system with Day/Night Mode Change by an NT key on Attendant Position.	(1) 244 :Terminating system change (2) 0 :Available (1) 245 :Trunk Restriction Class change (2) 0 :Available
B		

B	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class B for Day/Night Mode Change by station dialing to Attendant Position.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ ZZ: 00-15◀: Service Restriction Class B
CM15	Allow Day/Night Mode Change by station dialing in the Service Restriction Class B assigned by CM12 YY=02.	• YY=60 (1) 00-15 :Service Restriction Class B assigned by CM12 YY=02 (2) 1◀ :Allow
CM90	Assign the Loop keys to each D^{term}, and assign the function keys required for the Attendant Position to the D^{term}.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) AA01-AA75 : Loop Key AB00-AB99 : ICI/OPR Key F1020 : Release Key F0300 : Operator Call Key F1300-F1363: Night Key
CM08	Specify Line Preselection on a D^{term} after pressing the desired LINE/TRUNK key. **Note:** *To provide a Trunk Name/Station Name, refer to ALPHANUMERIC DISPLAY on Page 11.*	(1) 199 (2) 0 : Not required 1◀ : Required
END		

If a DSS Console is used with the D^{term} Attendant Position, add the following programming.

START	DESCRIPTION	DATA
CM10	Assign the DSS Console number to the required LEN.	(1) 000-763: LEN (2) E100-E131: DSS Console No. For PIM 0/1: E100-E107 For PIM 2/3: E108-E115 For PIM 4/5: E116-E123 For PIM 6/7: E124-E131
CM96	Assign the My Line number of the Attendant Position associated with each DSS Console.	(1) 00-31: DSS Console No. assigned by CM10 (E100-E131) (2) X-XXXXXXXX: My Line No. of Attendant Position
CM97	Assign station numbers to the DSS keys. Assign the MW, DND, NT keys as function keys.	(1) For DSS key: DSS Console No. (00-31) + $\boxed{,}$ + DSS key No. (00-59) (2) X-XXXXXXXX: Station No. (1) For Function key: DSS Console No. (00-31) + $\boxed{,}$ + DSS key No. (57-59) (2) F1049: Message Waiting F1053: Do Not Disturb F0043: Night Key
END		

Example:



L1-L5: Loop Keys

DDD :
FX :
WATS : ICI Keys
CCSA :
TIE :

RLS : Release Key
OPR : Operator Call Key
200 : My Line
OVR : Executive Override
NT : Night Key

Conditions

1. Operator Access Code: 0
2. My Line No.: 200
3. ICI/Function Keys
   - DDD Line: TRUNK 000-004 (ICI Line No. =AB20)
   - FX Line: TRUNK 005 (ICI Line No. =AB21)
   - WATS Line: TRUNK 006 (ICI Line No. =AB22)
   - CCSA Line: TRUNK 007 (ICI Line No. =AB23)
   - TIE Line: TRUNK 008-010 (ICI Line No. =AB24)
   - OPR Line: Operator Call from Stations (OPR Line No. =AB10)
   - OVR Key: Executive Override
   - NT Key: Night Key
4. Number of Loop: 5 (Loop Line No. =AA01-AA05)
5. Tenant No.: 00
6. Numbering Plan Group: 0
7. Type of D^{term}: DTP-16D-1

Programming example:

COMMAND CODE	1ST DATA	2ND DATA	REMARKS	
11	000	AA01	Loop Line Number	
	001	AA02		
	002	AA03		
	003	AA04		
	004	AA05		
	005	AB10	OPR Line Number	
	006	AB20	DDD	ICI Line Number
	007	AB21	FX	
	008	AB22	WATS	
	009	AB23	CCSA	
	010	AB24	TIE	
12-02	200	1500	Service Class for Attendant Position	
	AB10	1501	Service Class for ICI Line	
	AB20	1501		
	AB21	1501		
	AB22	1501		
	AB23	1501		
	AB24	1501		
12-03	AA01	08	Service Class for Loop Line	
	AA02	08		
	AA03	08		
	AA04	08		
	AA05	08		
	AB10	04	Hotline Assignment	
	AB20	04		
	AB21	04		
	AB22	04		
	AB23	04		
	AB24	04		
	200	15		
15-071	00	0	Attendant Position Class	
15-073	01	0	ICI/OPR Key Class	
17-1	AB10	1	Assign UCD Pilot Station to the ICI/ OPR Line Numbers	
	AB20	1		
	AB21	1		
	AB22	1		
	AB23	1		
	AB24	1		

COMMAND CODE	1ST DATA	2ND DATA	REMARKS
17-2	AB10	00	Assign UCD Group to the ICI/OPR Line Numbers
~	AB20	01	
	AB21	02	
	AB22	03	
	AB23	04	
	AB24	05	
20-0	0	A088	Operator Access Code
51-12	00	AB10	Operator Call Termination to OPR Line
08	250	0	
30-02	000	04	DIT
~	001	04	
	002	04	
	003	04	
	004	04	
	005	04	
	006	04	
30-04	000	AB20	Incoming Call Termination to ICI Line
~	001	AB20	
	002	AB20	
	003	AB20	
	004	AB20	
	005	AB21	
	006	AB22	
90-00	200,01	AA01	LOOP Key
	200,02	AA02	
	200,03	AA03	
	200,04	AA04	
	200,05	AA05	
~	200,07	F0006	OVR Key
	200,08	F1300	NT Key
	200,09	AB20	DDD Key
	200,10	AB21	FX Key
	200,11	AB22	WATS Key
	200,12	AB23	CCSA Key
	200,13	AB24	TIE Key
	200,14	F1020	RLS Key
	200,15	AB10	OPR Key
	200,16	200	My Line Key
08	244	0	Definition of NT key function
08	245	0	

MUSIC ON HOLD

Programming

To provide Hold Tone Source on the MP card:

START	DESCRIPTION	DATA
CM08	Select music to be provided.	(1) 183 (2) 0 : Nocturne 1◀: Minuet
CM48	Define the type of call to be provided with Hold Tone on the MP card.	• Y=0 00 : C.O. Line Call (1) 01 : Tie Line Call 02 : Internal Call (2) 1400: Hold Tone Source on MP card
END		

To provide Internal Hold Tone generated by DTG:

START	DESCRIPTION	DATA
CM48	Define the type of call to be provided with Hold Tone.	• Y=0 (1) 00 : C.O. Line Call 01 : Tie Line Call 02 : Internal Call (2) 1500: Hold Tone generated by DTG
END		

To provide External Hold Tone Source through Pin JACK on the MP card:

START	DESCRIPTION	DATA
CM48	Define the type of call to be provided with Hold Tone. **Note:** *Set the JP1 switch on the MP card to DOWN position for using external tone source.*	(1) • Y=0 00 : C.O. Line Call 01 : Tie Line Call 02 : Internal Call (2) 1400: Hold Tone Source through MP card
END		

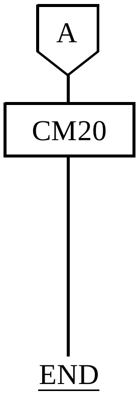
To provide External Hold Tone Source through the COT and DK card:

START	DESCRIPTION	DATA
CM10	Assign the COT and DK for interface with External Hold Tone Source to required LEN. **Note 1:** *The DK card number must be assigned to the first LEN (Level 0) and third LEN (Level 2) of each LT slot.* **Note 2:** *The COT card number must be assigned for each tenant. One External Hold Tone Source can be provided per tenant.*	(1) 000-763: LEN (2) DA00-DA09: COT Card No. **Note 2** E800-E831: DK Card No. For PIM 0/1: E800-E807 For PIM 2/3: E808-E815 For PIM 4/5: E816-E823 For PIM 6/7: E824-E831 **Note 3:** *Circuit No. 3 of E831 is used for built-in External Equipment Interface on MP card by setting CM44.*
CM44	Set the function of External Hold Tone Source interface to the DK card.	(1) XX Y XX : 00-31: Card No. E800-E831 assigned by CM10 Y : 0-3: Circuit No. 313 : Built-in External Equipment Interface on MP card (2) 0000-0009: External Hold Tone for Music on Hold
A		

	DESCRIPTION	DATA
A		
CM48	Define the type of call to be provided with External Hold Tone. **INITIAL**	• Y=0 (1) 00 : C.O. Line Call 01 : Tie Line Call 02 : Station (2) 0200: External Hold Tone Source
CM64	Specify External Hold Tone Source per each tenant.	• Y=1 (1) 00-63: Tenant No. (2) 00-09: External Hold Tone Source No.
CM08	Specify which tenant External Hold Tone is sent from.	(1) 388 (2) 0 : Tenant of held station/trunk 1◀: Tenant of holding station
END		

To provide the Message on Hold by the Digital Announcement Trunk (DAT):

START	**DESCRIPTION**	**DATA**
CM10	Assign the Digital Announcement Trunk card number to the required LEN. **Note 1:** *The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.*	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM 0/1: EB002-EB031 For PIM 2/3: EB032-EB063 For PIM 4/5: EB064-EB095 For PIM 6/7: EB096-EB127 **Note 2:** *EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of MP card.*
CM12	Assign the Service Restriction Class A to required station.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Digital Announcement Trunk access (Record/Replay/Delete) in the Service Restriction Class A assigned by CM12 YY=02.	• YY=33 (1) XX: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀: Allow
CM48	Define the type of call to be provided with Hold Message.	• Y=0 (1) 00 : C.O. Line Call 01 : Tie Line Call 02 : Internal Call (2) 0500: Hold Message
CM49	Assign the data for Message on Hold Service to the Digital Announcement Trunk.	• YY=00 (1) 000-001 : Built-in DAT on MP card 002-127 : Digital Announcement Trunk Card No. assigned by CM10 (EB002-EB127) (2) 05XX: Message on Hold XX : 00-63: Message No. • YY=05 (1) 00-63: Tenant No. (2) 00-63: Message No. assigned by CM49 YY=00
A		



DESCRIPTION	DATA
To record, replay and delete a message, assign the appropriate Digital Announcement Trunk access code respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A100: Record A101: Replay A102: Delete

To provide External Hold Tone Source through TNT card:

START	DESCRIPTION	DATA
CM10	Assign the TNT card number (External Hold Tone Source number) to the required LEN. **Note 1:** *The TNT card number must be assigned to the first LEN (Level 0) and the third LEN (Level 2) of each LT slot.* **Note 2:** *The TNT card number must be assigned for each tenant. One External Hold Tone Source can be provided per tenant.*	(1) 000-763: LEN (2) DA00-DA09: TNT Card No.
CM48	Define the type of call to be provided with External Hold Tone. **INITIAL**	• Y=0 (1) 00 : C.O. Line Call 01 : Tie Line Call 02 : Station (2) 0200: External Hold Tone Source
CM64	Specify External Hold Tone Source per each tenant.	• Y=1 (1) 00-63: Tenant No. (2) 00-09: External Hold Tone Source No. (TNT Card No. DA00-DA09)
CM08	Specify which tenant External Hold Tone is sent from.	(1) 388 (2) 0 : Tenant of held station/trunk 1◀ : Tenant of holding station
END		

Hardware Required

To provide External Hold Tone Source through the COT and DK card:

COT card
DK card or MP card (built-in External Equipment Interface)
External Hold Tone Source provided locally

To provide Message on Hold by Digital Announcement Trunk:

DAT card or MP card (built-in DAT)

To provide the External Hold Tone Source through the TNT card:

TNT card or through Pin Jack on MP card
External Tone Source provided locally

NAILED-DOWN CONNECTION-DATA

Programming

Refer to the Data Interface System Manual.

Hardware Required

DTI card
DPC card

NIGHT SERVICE

Attendant Night Transfer

Programming

START

	DESCRIPTION	DATA
CM08	Provide the system with Attendant Night Transfer.	(1) 018 :Attendant Night Transfer (2) 1◀ :Available
CM51	Assign the Night Station to each ATTCON Group.	• YY=13 (1) 00-03: ATTCON Group 0-3 assigned by CM60 YY=00 (2) X-XXXXXXXX: Night Station No.

END

Call Rerouting

Programming

Refer to the following:
NIGHT CONNECTION-FIXED/-FLEXIBLE on Page 376.
TRUNK ANSWER ANY STATION (TAS) on Page 387.
DIRECT INWARD TERMINATION (DIT) on Page 239.
DIRECT INWARD DIALING (DID) on Page 220.
TIE LINES on Page 474.

Day/Night Mode Change By Attendant Console

Programming

START	DESCRIPTION	DATA
CM60	Assign the password code for Day/Night Change by SN610 ATTCON. **INITIAL**	• YY=30 (1) 1 (2) XX-XX: Password Code (Max. 8 digits) X: 0-9, A(*), B(#) If no data is set, the default setting is NONE. In this case, the password is set to “12345678.”
CM90	Assign the Day/Night Mode key on SN610 ATTCON.	• YY=00 (1) ATTCON No. + $\boxed{,}$ + key No. (2) F6110
CM20	Assign the access code for providing Day/Night Mode change from a SN610 ATTCON, if required.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A155
END		

Note: *The following trunk data (CM30) can be changed by this feature (depending on programming).*

Day (Y)		Night (Y)
02	↔	03
04	↔	05
13	↔	14
15	↔	16
30	↔	31

Day/Night Mode Change By Station Dialing

Programming

START	DESCRIPTION	DATA
CM08	Provide the system with Day/Night Mode Change by Station Dialing.	(1) 244 : Change of Terminating System Incoming Trunk (2) 0 : Available (1) 245 : Change Trunk Restriction Class (2) 0 : Available
CM30	Assign the data for terminating system in Day Mode/Night Mode/Mode A/Mode B, to each Loop/Ground Start trunk, respectively.	• YY=02 Day Mode • YY=03 Night Mode • YY=40 Mode A • YY=41 Mode B (1) 000-255: Trunk No. (2) 04: Direct-In Termination
	Assign the station number to be terminated by DIT in Day Mode/Night Mode/Mode A/ Mode B respectively.	• YY=04 Day Mode • YY=05 Night Mode • YY=42 Mode A • YY=43 Mode B (1) 000-255: Trunk No. (2) X-XXXXXXXX: Station No.
CM65	When using Mode A or Mode B, assign the terminating system Mode change.	• YY=29 (1) 00-63 : Tenant No. (2) 0 : Two kinds of mode (Day Mode, Night Mode) 1◀ : Four kinds of mode (Day Mode, Night Mode, Mode A, Mode B)
CM12	Assign Service Restriction B to each station.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ ZZ: 00-15◀: Service Restriction Class B
CM15 A	Allow Day/Night Mode Change by Station Dialing in the Service Restriction B assigned by CM12 YY=02.	• YY=60 (1) 00-15 : Service Restriction Class B assigned by CM12 YY=02 (2) 1◀ : Allow

	DESCRIPTION	DATA
A		
CM20	Assign the access code for Day/Night Mode Change by Station Dialing.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (68) (2) A043 : Day/Night Mode Change by Station Dialing
CM90	Assign the Day/Night Mode Change by Tenant key on the D^{term}, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F1300-F1363:Day/Night Mode Change by Tenant 00-63
	To the key which is set by CM90 YY=00> F13XX, specify the call indicator lamp control as “not available”.	• YY=05 (1) My Line No. + $\boxed{,}$ + Key No. (2) 0: Not available
CM97	Assign the Day/Night Mode Change by Tenant key on the DSS Console, if required.	(1) DSS Console No. (00-31) + DSS key No. (00-59) (2) F1300-F1363:Day/Night Mode Change by Tenant 00-63
END		

Note: *The following trunk data (CM30) can be changed by this feature (depending on programming).*

Day (Y)		Night (Y)	Mode A (Y)		Mode B(Y)
02	↔	03	40	↔	41
04	↔	05	42	↔	43
13	↔	14			
15	↔	16			
30	↔	31			

Night Connection-Fixed/Flexible

Programming

To Provide Night Connection Stations:

START	DESCRIPTION	DATA
CM30	Assign a Night Connection Station to each incoming trunk.	• YY=03 (1) 000-255: Trunk No. (2) 04: Direct-In Termination • YY=05 (1) 000-255: Trunk No. (2) X-XXXXXXXX: Night Connection Station No.
	Assign the destination to which a call is forwarded when the Night Connection Station is busy/no answer.	• YY=14 When Night Connection Station is busy (1) 000-255: Trunk No. (2) 01 : To TAS 04 : To Attendant Console 06 : Automatic Camp-On 15◀ : Keep the call ringing until the station becomes idle • YY=16 When Night Connection Station is no answer (1) 000-255: Trunk No. (2) 01 : To Attendant Console 03 : To TAS 15◀ : Keep the call ringing until the station answers
CM41	Specify the timing for a call forwarding when the Connection Station is no answer. **Note:** *This timing is also applied to Call Forwarding-No Answer, Attendant Overflow, and Group Diversion.*	• Y=0 (1) 01 (2) 01-30: 4 sec.-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 sec.
END		

Day/Night Mode Change By System Clock

(Series 2100 software required)

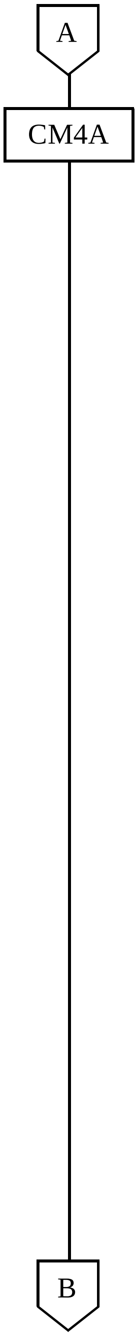
Programming

START	DESCRIPTION	DATA
CM02	Assign the system clock data.	(1) 0: Calendar Year (2) 1999-2099 (1) 1: Date (2) MM DD WW MM: 01-12 (Month) DD : 01-31 (Date) WW: 00 (Sunday) 01 (Monday) 02 (Tuesday) 03 (Wednesday) 04 (Thursday) 05 (Friday) 06 (Saturday) (1) 2: Time (2) HH MM SS HH : 00-23 (Hour) MM: 00-59 (Minute) SS : 00-59 (Second)
CM65	Select the two kinds of mode change or the four kinds of mode change per each tenant.	• YY=29 (1) 00-63: Tenant No. (2) 0 : Two kinds of mode (Day Mode, Night Mode) 1◀ : Four kinds of mode (Day Mode, Night Mode, Mode A, Mode B)
	Assign whether the Trunk Restriction Class is changed according to the schedule of Day/Night Mode Change by System Clock.	• YY=36 (1) 00-63: Tenant No. (2) 0 : Provide (Day Mode/Night Mode only) 1◀ : Not provided

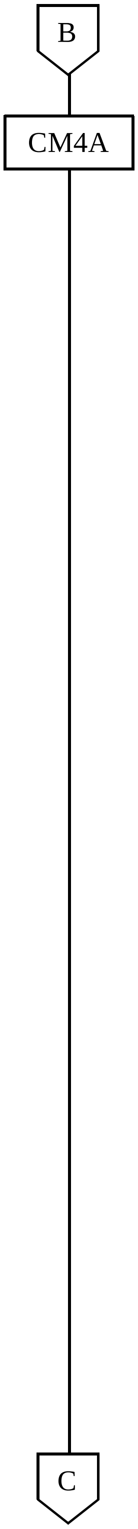
Note: *In four kind of mode change, the trunk restriction class is changed as follows:*

- *Day Mode → Day Mode*
- *Night Mode/Mode A/Mode B → Night Mode*

A



DESCRIPTION	DATA
Assign the Default Pattern number to each tenant to simplify the schedule assignment, if required. See “Default Pattern of Time Schedule”. See Page 381. **OFF LINE** **Note 1:** *When CM4A YY=90 is assigned, previously assigned system data is overwritten.* **Note 2:** *The schedule of each Default Pattern can be changed after the Default Pattern has been assigned.*	• YY=90 (1) 00-63: Tenant No. (2) 00: Default Pattern No. 0 01: Default Pattern No. 1 02: Default Pattern No. 2 03: Default Pattern No. 3
Assign the calendar number to each tenant number.	• YY=00 (1) 00-63: Tenant No. (2) 00-03: Calendar No. 1-4
Assign the week schedule number to the date to change schedule, in each calendar number assigned by CM4A YY=00.	• YY=01 Calendar No. 1 • YY=02 Calendar No. 2 • YY=03 Calendar No. 3 • YY=04 Calendar No. 4 (1) XX ZZ : Date XX: 01-12 : Month ZZ: 01-31 : Date (2) 10: Week Schedule No. 0 11: Week Schedule No. 1 12: Week Schedule No. 2 13: Week Schedule No. 3 NONE◀ : Week Schedule No. 0



DESCRIPTION	DATA
If you want to assign the exceptional schedule for a date, assign the time schedule number to the date, in each calendar number assigned by CM4A YY=00.	• YY=01 Calendar No. 1 • YY=02 Calendar No. 2 • YY=03 Calendar No. 3 • YY=04 Calendar No. 4 (1) XX ZZ: Date XX: 01-12: Month ZZ: 01-31: Date (2) 20: Time Schedule No. 0 21: Time Schedule No. 1 22: Time Schedule No. 2 23: Time Schedule No. 3 24: Time Schedule No. 4 25: Time Schedule No. 5 26: Time Schedule No. 6 27: Time Schedule No. 7 NONE◀ : Week Schedule No. 0
Assign the time schedule number to each day in the week schedule assigned by CM4A YY=01-04.	• YY=10 Week Schedule No. 0 • YY=11 Week Schedule No. 1 • YY=12 Week Schedule No. 2 • YY=13 Week Schedule No. 3 (1) 0: Sunday 1: Monday 2: Tuesday 3: Wednesday 4: Thursday 5: Friday 6: Saturday (2) 20: Time Schedule No. 0 21: Time Schedule No. 1 22: Time Schedule No. 2 23: Time Schedule No. 3 24: Time Schedule No. 4 25: Time Schedule No. 5 26: Time Schedule No. 6 27: Time Schedule No. 7 NONE◀ : Time Schedule No. 0

C

DESCRIPTION | **DATA**

CM4A

Assign the time and its mode for the time schedule assigned by CM4A YY=10-13 or YY=01-04.

Note 1: *Only "0" or "5" is available for the last digit number of minute at the first data of CM4A YY=20-27.*
When the following last digit number is assigned, the number is corrected and set as follows:

assigned number		*corrected to*
1-4	→	*0*
6-9	→	*5*

Note 2: *The mode is changed after 4-8 seconds of the assigned time.*

- YY=20 (Time Schedule No. 0)
- YY=21 (Time Schedule No. 1)
- YY=22 (Time Schedule No. 2)
- YY=23 (Time Schedule No. 3)
- YY=24 (Time Schedule No. 4)
- YY=25 (Time Schedule No. 5)
- YY=26 (Time Schedule No. 6)
- YY=27 (Time Schedule No. 7)

(1) XX ZZ : Time
XX: 00-23 : Hour
ZZ: 00-55 : Minute **Note 1**, **Note 2**

(2) 00: Day Mode
01: Night Mode
02: Mode A
03: Mode B
NONE◀ : Day Mode

CM61

To cancel the Day/Night Mode Change by System Clock temporarily, assign the external key as the cancel key.

- YY=30

(1) XX Z
XX: 00-31 : DK Card No. assigned by CM10 (E900-E963)
Z: 0-3 : Circuit No.
633 : MP Built-in External Key Interface

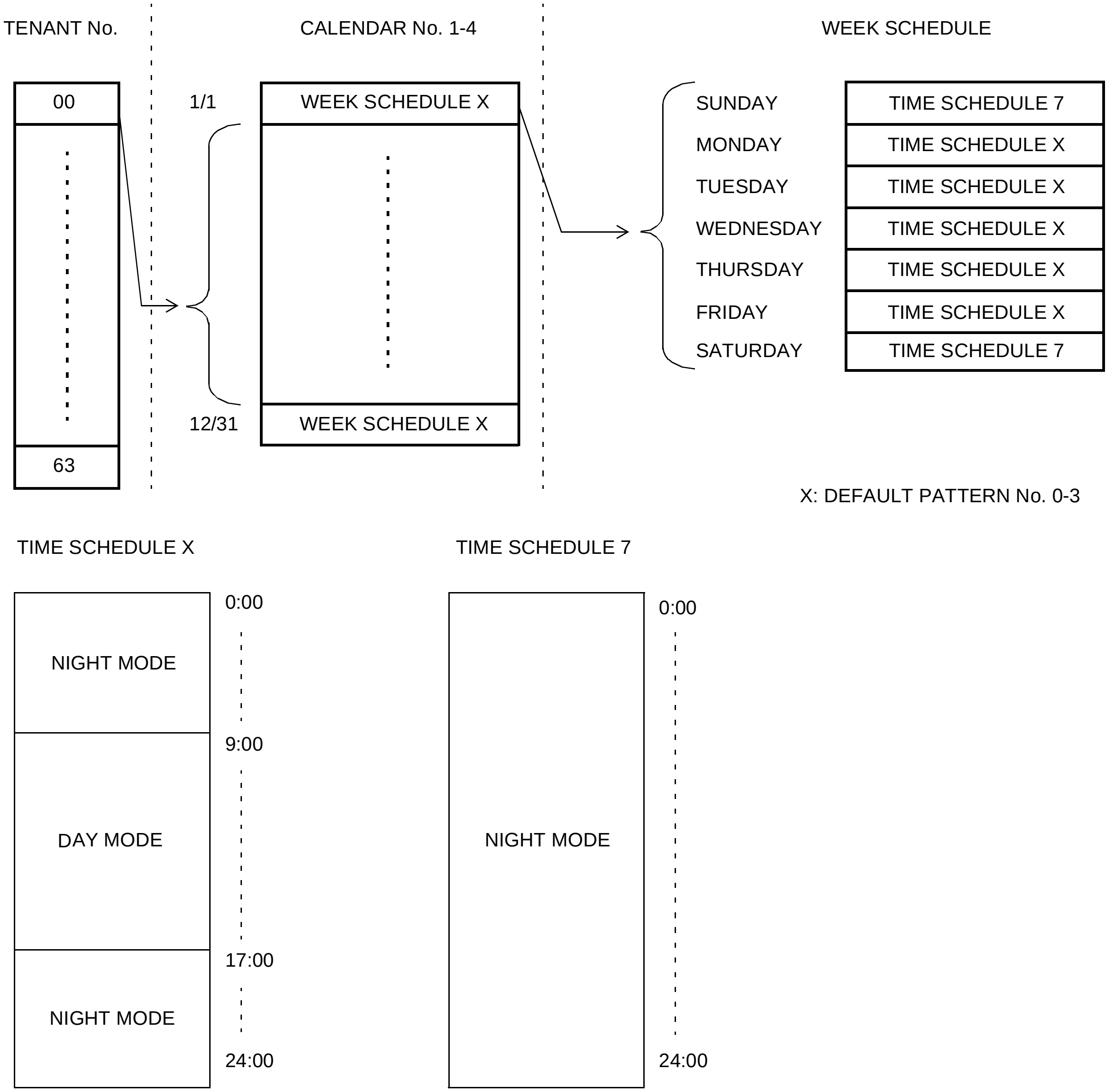
(2) 01 : Day/Night Mode Change by System Clock Cancel Key

END

- Default Pattern of Time Schedule
  By assigning CM4A YY=90; Default Pattern No. 0-3, you can simplify the schedule assignment for each tenant. The schedule of each Default Pattern can be changed after the Default Pattern has been assigned.

  The following shows the summary of the Default Pattern and the schedule set by each Default Pattern.

Summary of Default Pattern



Default Pattern of Time Schedule (CM4A YY=90)

- Default Pattern No. 0 (CM4A YY=90 2nd data: 00)

CM4A Y No.	1ST	2ND	MEANING OF SETTING
00	00-63	00	Calendar No. 1 is used for the tenant
01	0101-1231	10	Week schedule No. 0 is used for all date
10	1-5	20	Time schedule No. 0 is used for Monday through Friday
10	0, 6	27	Time schedule No. 7 is used for Saturday and Sunday
20	0000-0855	01	0:00-9:00 is Night Mode for time schedule No. 0
20	0900-1655	00	9:00-17:00 is Day Mode for time schedule No. 0
20	1700-2355	01	17:00-24:00 is Night Mode for time schedule No. 0
27	0000-2355	01	0:00-24:00 is Night Mode for time schedule No. 7

- Default Pattern No. 1 (CM4A YY=90 2nd data: 01)

CM4A Y No.	1ST	2ND	MEANING OF SETTING
00	00-63	01	Calendar No. 2 is used for the tenant
02	0101-1231	11	Week schedule No. 1 is used for all date
11	1-5	21	Time schedule No. 1 is used for Monday through Friday
11	0, 6	27	Time schedule No. 7 is used for Saturday and Sunday
21	0000-0855	01	0:00-9:00 is Night Mode for time schedule No. 1
21	0900-1655	00	9:00-17:00 is Day Mode for time schedule No. 1
21	1700-2355	01	17:00-24:00 is Night Mode for time schedule No. 1
27	0000-2355	01	0:00-24:00 is Night Mode for time schedule No. 7

Default Pattern of Time Schedule (CM4A YY=90)

- Default Pattern No. 2 (CM4A YY=90 2nd data: 02)

CM4A Y No.	1ST	2ND	MEANING OF SETTING
00	00-63	02	Calendar No. 3 is used for the tenant
03	0101-1231	12	Week schedule No. 2 is used for all date
12	1-5	22	Time schedule No. 2 is used for Monday through Friday
12	0, 6	27	Time schedule No. 7 is used for Saturday and Sunday
22	0000-0855	01	0:00-9:00 is Night Mode for time schedule No. 2
22	0900-1655	00	9:00-17:00 is Day Mode for time schedule No. 2
22	1700-2355	01	17:00-24:00 is Night Mode for time schedule No. 2
27	0000-2355	01	0:00-24:00 is Night Mode for time schedule No. 7

- Default Pattern No. 3 (CM4A YY=90 2nd data: 03)

CM4A Y No.	1ST	2ND	MEANING OF SETTING
00	00-63	03	Calendar No. 4 is used for the tenant
04	0101-1231	13	Week schedule No. 3 is used for all date
13	1-5	23	Time schedule No. 3 is used for Monday through Friday
13	0, 6	27	Time schedule No. 7 is used for Saturday and Sunday
23	0000-0855	01	0:00-9:00 is Night Mode for time schedule No. 3
23	0900-1655	00	9:00-17:00 is Day Mode for time schedule No. 3
23	1700-2355	01	17:00-24:00 is Night Mode for time schedule No. 3
27	0000-2355	01	0:00-24:00 is Night Mode for time schedule No. 7

Overflow For TAS Queue

(Series 2100 software required)

Programming

In addition to the TAS programming (See Page 387), do the following programming.

START	DESCRIPTION	DATA
CM51	Assign the destination of Overflow for TAS Queue.	• YY=26 Day Mode • YY=27 Night Mode • YY=28 Mode A • YY=29 Mode B (1) 00-63: Tenant No. (2) X-XXXXXXXX: Station No. E000: Attendant Console EB000-EB127: Digital Announcement Trunk No. assigned by CM10
CM41	Specify the timing of Overflow for TAS Queue.	• Y=0 (1) 42 (2) 01-99: 4 sec.-396 sec. (4 sec. increments) If no data is set, the default setting is 28-32 sec.
CM51	When a call is forwarded to the VMS/station/Attendant Console by Overflow for TAS Queue, assign the Call Forwarding setting station number, which is sent to the destination.	• YY=30 (1) 00-63: Tenant No. (2) X-XXXXXXXX: Station No.
CM49	When a Digital Announcement Trunk is set as the destination of Call Forwarding, set the function of the Digital Announcement Trunk as announcement service for Overflow for TAS Queue.	• YY=00 (1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk Card No. (EB002-EB127) assigned by CM10 (2) 1800: Announcement Service for Overflow for TAS Queue
END		

Hardware Required

When a DAT is used as the destination of Call Forwarding:
DAT card or MP card (built-in DAT)

Queue Limit For TAS

(Series 2100 software required)

Programming

In addition to the TAS programming (See Page 387), perform the following programming.

START	DESCRIPTION	DATA
CM64	Assign the number of Queue Limit for TAS to each mode and tenant.	• Y=3 Day Mode • Y=4 Night Mode • Y=5 Mode A • Y=6 Mode B (1) 00-63: Tenant No. (2) 01-99: 1-99 lines NONE◀ : No limit
CM76	Specify the terminating system as TAS.	• YY=01 Day Mode • YY=02 Night Mode • YY=03 Mode A • YY=04 Mode B (1) 000-999: Number Conversion Block No. assigned by CM76 YY=00/90 (2) D13: TAS
	Specify whether the incoming call of each DID number is restricted by Queue Limit for TAS. **Note:** *When there are two or more DID numbers for one tenant, and if you want to set the Queue Limit for only one DID number, set "0" to the DID number, and set "3" for the other DID numbers.* *If you want to set the Queue Limit for one DID number and the other DID numbers concurrently, set "0" to the DID number, and set "2" to the other DID numbers.*	• YY=16 (1) 000-999: Number Conversion Block No. assigned by CM76 YY=00/90 (2) 0 : Restricted 2 : Not restricted (countable for Queue Limit) 3◀ : Not restricted (uncountable for Queue Limit)
A		

A	DESCRIPTION	DATA
CM51	Assign the destination of Call Forwarding by Queue Limit for TAS.	• YY=26 Day Mode • YY=27 Night Mode • YY=28 Mode A • YY=29 Mode B (1) 00-63: Trunk No. (2) X-XXXXXXXX: Station No. E000: Attendant Console EB000-EB127: Digital Announcement Trunk No. assigned by CM10
	When a call is forwarded to the VMS/station/ Attendant Console by Queue Limit for TAS, assign the Call Forwarding setting station number, which is sent to the destination.	• YY=30 (1) 00-63: Tenant No. (2) X-XXXXXXXX: Station No.
CM49	When a Digital Announcement Trunk is set as the destination of Call Forwarding, set the function of the Digital Announcement Trunk as announcement service for Queue Limit for TAS.	• YY=00 (1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk Card No. (EB002-EB127) assigned by CM10 (2) 1800: Announcement Service for Queue Limit for TAS
CM08	Provide the system with reset of the Queue Limit counter for TAS per tenant. The system will reset the counter when the following operation does not have occurred about for one hour. • Increase/decrease of counter • Incoming calls restricted by Queue Limit • Call Forwarding to a station/Attendant/ DAT by Queue Limit	(1) 602 (2) 1◀ : To provide
END		

Hardware Required

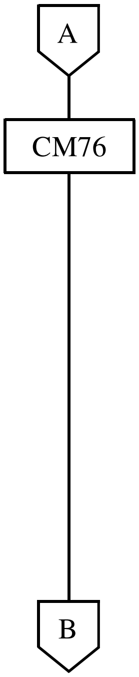
When a DAT is used as the destination of Call Forwarding:
DAT card or MP card (built-in DAT)

Trunk Answer Any Station (TAS)

Programming

START	DESCRIPTION	DATA
CM12	Assign a Trunk Restriction Class to each station.	• YY=01 (1) X-XXXXXXXX: Station No. (2) X Z Z: 1-8: Night Trunk Restriction Class 1: Unrestricted (RCA) 2: Non-Restricted 1 (RCB) 3: Non-Restricted 2 (RCC) 4: Semi-Restricted 1 (RCD) 5: Semi-Restricted 1 (RCE) 6: Restricted 1 (RCF) 7: Restricted 2 (RCG) 8: Fully Restricted (RCH)
	Assign the Service Restriction Class B for the TAS to required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ ZZ: 00-15◀: Service Restriction Class B
CM15	Allow TAS service in the Service Restriction Class B assigned by CM12 YY=02.	• YY=53 (1) 00-15: Service Restriction Class B assigned by CM12 YY=02 (2) 1◀ : Allow
CM30	Assign the TAS to the terminating system in Day/Night Mode/Mode A/Mode B for required trunks.	• YY=02 Day Mode • YY=03 Night Mode • YY=40 Mode A • YY=41 Mode B (1) 000-255: Trunk No. (2) 03: Trunk-Direct Appearance + TAS 08: Dial-in 13: TAS 18: ISDN Indial
	Assign the TAS group number to the trunks assigned by CM30 YY=02/03/40/41.	• YY=17 (1) 000-255: Trunk No. (2) 00-63: TAS group no.

A



DESCRIPTION	DATA
Assign the data for interpreting the digits received. CM35 YY=18 must be set to “0” (received Digits Conversion is to be provided).	• YY=01 Day Mode • YY=02 Night Mode • YY=03 Mode A • YY=04 Mode B (1) 000-999: Number Conversion Block No. assigned by CM76 YY=00/90 (2) X-XXXXXXXX: Station No. to be terminated DXX: Change Terminating System to: D03: Trunk-Direct Appearances + TAS D13: TAS

B

	DESCRIPTION	DATA

CM53

Specify the function of each type of TAS within a system.

Y \ (1)		0	1	3	4	7
0	TAS Answer A	0/1◀	0/1◀	0/1◀	0/1◀	0/1◀
1	TAS Answer B	0/1◀	0/1◀	0/1◀	0/1◀	0/1◀
2	TAS Answer C	0/1◀	0/1◀	0/1◀	0/1◀	0/1◀
3	TAS Answer D	0/1◀	0/1◀	0/1◀	0/1◀	0/1◀
4	TAS Answer E	0/1◀	0/1◀	0/1◀	0/1◀	0/1◀

- Y=0-4 TAS Answer A-E

(1) Type of Call
0 : C.O. Incoming Call
1 : Tie Line/DID
3 : C.O. Incoming Call in Night Mode
4 : Overflowed DIT Call
(2) 0 : Cannot be answered
1◀ : Can be answered

(1) 7 : A call terminated to different tenant
(2) 0 : Can be answered
1◀ : Cannot be answered

CM20

Assign the access code for each type of TAS (TAS Answer A-E) assigned by CM53.

- Y=0-3 Numbering Plan Group 0-3

(1) X-XXXX: Access Code
(2) A047 : TAS Answer A
A048 : TAS Answer B
A049 : TAS Answer C
A050 : TAS Answer D
A051 : TAS Answer E

CM63

Specify the tenants allowing TAS Answer between them.

- Y=0

(1) XX ZZ
XX : 00-63: Tenant No. of TAS Answer station
ZZ : 00-63: Tenant No. of Trunk
(2) 0 : Allow
1◀ : Restricted

END

To provide the External TAS Indicator via DK card:

START	DESCRIPTION	DATA
CM10	Assign the card number of DK to required LEN. **Note:** *The DK card number must be assigned to the first LEN (Level 0) and the third LEN (Level 2) of each LT slot.*	(1) 000-763 : LEN (2) E800-E831 : DK Card No. For PIM 0/1 : E800-E807 For PIM 2/3 : E808-E815 For PIM 4/5 : E816-E823 For PIM 6/7 : E824-E831
CM44	Assign the TAS Group number assigned by CM30 YY=17 to circuit number of DK card. **Note:** *MP built-in External Equipment Interface is not available for External TAS Indicator connection.*	(1) XX Y XX : 00-31: DK Card No. assigned by CM10 (E800-E831) Y : 0-3: Circuit No. (2) 13XX XX: 00-63: TAS Group No. 00-63 assigned by CM30 YY=17
CM59	Specify the indication pattern on External TAS Indicator.	(1) 00 (2) 01 : 30 IPM (1 sec. ON/OFF) 02 : 60 IPM (0.5 sec. ON/OFF) 03 : 120 IPM (0.25 sec. ON/OFF) 07 : Steady on NONE◀ : 120 IPM (0.25 sec. ON/OFF)
END		

To provide the telephone set for TAS Indication:

START

	DESCRIPTION	DATA
CM10	Assign the TAS Buzzer number (Telephone set for TAS Indication) to required LEN. The TAS Buzzer number must correspond to the TAS Group number assigned by CM30 YY=17. E600-E663 →TAS Group 00-63	(1) 000-763: LEN (2) E600-E663: TAS Buzzer No.

END

Hardware Required

To provide the External TAS Indicator:
– DK card
– Indicator
Requirement for External Indicator
Control Method: Ground/Battery (-24V) (Maximum 125 mA)
Type: Visual and/or Audible type with volume control
To provide the telephone set for TAS Indication:
– LC card
– Conventional telephone sets

OFF-HOOK ALARM

Programming

START	DESCRIPTION	DATA
CM13	Provide Off-Hook Alarm for the required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) 0: To provide
CM51	Assign the destination for Off-Hook Alarm to a station or Attendant Console.	• YY=12 (1) 00-63: Tenant No. (2) X-XXXXXXXX: Station No. E000: Attendant Console
CM90	If the Attendant Console is designated as the destination of Off-Hook Alarm by CM51 YY=12, assign Off-Hook Alarm to the ICI key.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6066: Off-Hook Alarm
CM41	Specify the timing for Off-Hook Alarm.	• Y=0 (1) 22 (2) 01-08: 4 sec.-32 sec. in 4 sec. increments If no data is set, default setting is 28-32 seconds.
CM12	Specify the Service Restriction Class C for Off-Hook Alarm to busy destination.	• YY=07 (1) X-XXXXXXXX: Station No. of destination (2) 00-15◀: Service Restriction Class C
CM15	Allow the Off-Hook Alarm call in the Service Restriction Class C assigned by CM12 YY=07.	• YY=97, 98 (1) 00-15: Service Restriction Class C assigned by CM12 YY=07 (2) See left column.
END		

Y		MEANING OF DATA
97	98	
0	0	UCD Call Waiting (CM08>212=0) Call Waiting is automatically selected, if UCD is not provided in the system.
0	1	UCD (CM08>212=1)
1	0	Call Waiting
1	1	Hunting ◀

OFF-PREMISES EXTENSION

Programming

START	DESCRIPTION	DATA
CM10	Assign the station number of Long Line Circuit (AUC card) to required LEN. **Note:** *The station number must be assigned to the first LEN (Level 0) and second LEN (Level 1) of each LT slot.*	(1) 000-763: LEN (2) X-XXXXXXXX: Station No.
CM13	Remove the PAD on Off Premises Extension.	• YY=09 (1) X-XXXXXXXX: Station No. (2) 0: No PAD
END		

Hardware Required

AUC card

PAD LOCK

Programming

(1) To change the Station Class with Station Authorization Code

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A to each station.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Authorization Code in the Service Restriction Class A assigned by CM12 YY=02.	• YY=31 Authorization Code (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀: Allow
CM42	Specify the maximum number of digits for Station Authorization Code. **(Series 2200 R3.1 software required)**	(1) 73 (2) 01-08: 1 digit-8 digits NONE◀: 4 digits
CM20	Assign the access code for Station Class change with Station Authorization Code. **(Series 2200 R3.1 software required)**	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A230: Station Class change with Station Authorization Code
CM2B	Assign the temporary Trunk Restriction Class to be applied to each station after the station class is changed. **(Series 2200 R3.1 software required)**	• YY=01 (1) X-XXXXXXXX: Station No. (2) 1-8: Trunk Restriction Class 1◀: Unrestricted (RCA) 2 : Non-Restricted 1 (RCB) 3 : Non-Restricted 2 (RCC) 4 : Semi-Restricted 1 (RCD) 5 : Semi-Restricted 2 (RCE) 6 : Restricted 1 (RCF) 7 : Restricted 2 (RCG) 8 : Fully-Restricted (RCH)

A

A	DESCRIPTION	DATA
CM2B	Assign the temporary Service Restriction Class A/B/C to be applied to each station after the station class is changed. **[Series 2200 (R3.1) software required]**	• YY=02 (1) X-XXXXXXXX: Station No. (2) 00-15◀: Service Restriction Class A • YY=03 (1) X-XXXXXXXX: Station No. (2) 00-15◀: Service Restriction Class B • YY=04 (1) X-XXXXXXXX: Station No. (2) 00-15◀: Service Restriction Class C
CM08	Select the timing when the temporary service class returns to proper service class.	(1) 258 (2) 0 : When called number has been dialed 1◀: When station goes on hook
END		

(2) To set/change Station Authorization Code from each station

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A to each station.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Station Authorization Code Set/Change in the Service Restriction Class A assigned by CM12 YY=02. **(Series 2200 R3.1 software required)**	• YYY=141 Station Authorization Code Set/Change (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀: Allow
CM20	Assign the access code for Station Authorization Code Set/Change. **(Series 2200 R3.1 software required)**	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A231: Station Authorization Code Set/Change
CM08	Specify whether the mask indication (*) is provided for Station Authorization Code entry. **(Series 2200 R3.1 software required)** **Note:** *When CM08>508 2nd data =0 (To provide) is set, the mask indication for Authorization Codes, Forced Account Codes and DISA codes are also provided.*	(1) 508 (2) 0 : Provided 1◀: Not provided
END		

Note: *One Station Authorization Code can be assigned per station.*

(3) To provide Pad Lock Set/Reset from the station

START	**DESCRIPTION**	**DATA**
CM2B	Assign the Service Restriction Class A to each station. **[Series 2200 (R3.1) software required]**	• YY=02 (1) X-XXXXXXXX: Station No. (2) 00-15◀: Service Restriction Class A
CM15	Allow Pad Lock Set/Reset by Station Authorization Code in the Service Restriction Class A assigned by CM2B YY=02. **[Series 2200 (R3.1) software required]**	• YYY=140 Pad Lock Set/Reset by Station Authorization Code (1) 00-15: Service Restriction Class A assigned by CM2B YY=02 (2) 0: Allow
CM20	Assign the access code for Pad Lock Set/Reset by Station Authorization Code. **[Series 2200 (R3.1) software required]**	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A232: Pad Lock Set by Station Authorization Code A233: Pad Lock Reset by Station Authorization Code
END		

(4) To set/clear/display Station Authorization Code on the MAT

START	**DESCRIPTION**	**DATA**
CM2B	Set/clear/display Station Authorization Code. **[Series 2200 (R3.1) software required]**	• YY=00 (1) X-XXXXXXXX: Station No. (2) X-XXXXXXXX: Station Authorization Code CCC: Clear
END		

PERIODIC TIME INDICATION TONE

Programming

START	DESCRIPTION	DATA
CM08	Provide the system with this feature. And specify availability of this service on Tie Line call.	(1) 135: On outgoing C.O. line call (2) 0: To provide (1) 136: On outgoing Tie line call (2) 0 : To provide 1◀ : Not provided
CM12	Assign the Service Restriction Class B for this feature to required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ ZZ: 00-15◀: Service Restriction Class B
CM15	Allow Periodic Time Indication Tone in the Service Restriction Class B assigned by CM12 YY=02.	• YY=61 (1) 00-15 : Service Restriction Class B assigned by CM12 YY=02 (2) 1◀ : Allow
CM13	Assign required stations as Ordinary Station. If assigned to 0 (Analog Data Station), this feature will not be applied to the station.	• YY=07 (1) X-XXXXXXXX: Station No. (2) 1◀ : Ordinary Station
CM41	Specify the timing interval for Periodic Time Indication Tone.	• Y=0 (1) 09 (2) 00-12: 36 seconds-724 seconds If no data is set, the default setting is 180 seconds-184 seconds
END		

POOLED LINE ACCESS

Programming

START	DESCRIPTION	DATA
CM11	Assign the Pooled Lines (Virtual Line station number) to the required Virtual LEN.	(1) 000-255: Virtual LEN (2) X-XXXXXXXX: Virtual Line Station No.
	The Virtual LENs have no relation with the physical LEN used in CM10. Therefore, any Virtual LENs can be assigned to each Virtual Line station number. However, the Virtual Line station number should be different from the Single Line number assigned by CM10.	
CM90	Assign the Pooled Line keys to each D^{term}. Pooled Lines 00-63 can answer a call terminated to tenants 00-63 respectively, and can originate a call using trunk routes 00-63 respectively.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F4100-F4163: Pooled Line 00-63

Pooled Line	Origination	Termination
00	Trunk Route 00	Tenant 00
01	01	01
≀	≀	≀
63	Trunk Route 63	Tenant 63

A

	DESCRIPTION	DATA
A		
CM30	Assign a trunk route number and Tenant No. to the trunks in the Pooled Line group. **Note:** *Refer to the Command Manual for the Resident System Program.*	• YY=00 Trunk Route Allocation (1) 000-255: Trunk No. (2) 00-63: Trunk Route No. **Note** • YY=01 Allocation of tenants to trunks (1) 000-255 : Trunk No. (2) 00-63 : Tenant No. (00)
	Specify the terminating system, including TAS, of the trunks in the Pooled Line group.	• YY=02 Terminating System in Day Mode • YY=03 Terminating System in Night Mode • YY=40 Terminating System in Mode A • YY=41 Terminating System in Mode B (1) 000-255: Trunk No. (2) 03: Trunk-Direct Appearances and TAS 10: Attendant Console + TAS 12: Attendant Console + Trunk-Direct Appearances + TAS
CM08	Specify whether call terminating is indicated on the Pooled Line keys assigned by CM90>F4100-F4163.	(1) 116 (2) 0 : Available 1◀ : Not available
END		

Hardware Required

D^{term} and DLC card

POWER FAILURE TRANSFER

Programming

To use the AUC card:

	DESCRIPTION	DATA
START		
CM10	Assign the AUC card to the required LEN.	(1) 000-763 : LEN (2) X-XXXXXXXX : Station No.
	Assign the COT card to the required LEN.	(1) 000-763 : LEN (2) D000-D255 : Trunk No.
END		

To use the PFT card:
No programming is required.

Hardware Required

AUC card and COT card, or PFT card

PRIORITY CALL

Programming

START

	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A for Priority Call to the required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Priority Call in the Service Restriction Class A assigned by CM12 YY=02.	• YY=17 Priority Call 0 • YY=18 Priority Call 1 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for Priority Calls 0 and 1 respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A088: Priority Call 0 A089: Priority Call 1
CM08	Specify the destination for Priority Calls 0 and 1.	(1) 250 : For Priority Call 0 (2) 0 : Same Station as Off-Hook Alarm 1◀ : Attendant Console (1) 251 : For Priority Call 1 (2) 0 : Same station as Off-Hook Alarm 1◀ : Attendant Console
CM90	If CM08>250/251 is set to "1", assign the Priority Calls 0 and 1 to any Priority Call Keys on ATTCON/DESKCON.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6054: Priority Call 0 F6055: Priority Call 1
CM51	If CM08>250/251 is set to "0", assign the destination of Priority Calls 0 and 1 to the desired station.	• YY=12 (1) 00-63: Tenant No. (2) X-XXXXXXXX: Station No.

END

PRIVACY

Programming

	DESCRIPTION	DATA
START		
CM12	Assign the Service Restriction Class B for Privacy Release to the required stations.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XXZZ ZZ: 00-15◀: Service Restriction Class B
CM15	Allow Privacy Release in the Service Restriction Class B assigned by CM12 YY=02.	• YY=63 (1) 00-15 : Service Restriction Class B assigned by CM12 YY=02 (2) 1◀ : Allow
END		

PRIVATE LINES

Programming

When providing Private Lines for a single line or D^{term}, perform the following Trunk-Direct Appearances programming.

START	DESCRIPTION	DATA
CM12	Assign the trunks to be seized on a per-station basis.	• YY=16 (1) X-XXXXXXXX: Station No. (2) D000-D255: Trunk No.
CM35	Specify the designated seizure of trunks on a per-trunk route basis.	• YY=98 (1) 00-63 : Trunk Route No. (2) 0 : Private Lines 1◀ : No Private Lines
CM42	Specify the number of times to hunt through the trunks within the trunk route.	(1) 08 (2) 01-16: One time-16 times If data is not set, the default setting is 00 (no seizure when the designated trunk is busy). To assign default setting, assign “ccc”.
END		

PROPRIETARY MULTILINE TERMINAL

Programming

START	DESCRIPTION	DATA
CM10	Assign the D$^{\text{term}}$ station number to the associated LEN. **Note 1:** *When DLC card is accommodated, the D$^{\text{term}}$ station number must be assigned for the all lines of the card.* **Note 2:** *When the following features are used with AP00, do not assign 5 or more digit station numbers.* • *SMDR/PMS* • *Front Desk Instrument (D$^{\text{term}}$)*	(1) 000-763: LEN (2) FX-FXXXXXXXX: D$^{\text{term}}$ station No. X-XXXXXXXX represents My Line No.
CM12	Allow the accommodation of Single Line Telephone to D$^{\text{term}}$, if required (Assignment for Single Line Telephone only).	• YY=05 (1) X-XXXXXXXX: Station No. (2) 0: Accommodated
CM90	Assign the station numbers, trunk numbers or service feature access keys on each D$^{\text{term}}$, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) Refer to Command Manual (CM90)
CM12	Specify the type of D$^{\text{term}}$ accommodated in each DLC card. INITIAL **Note 1:** *For PN-2DLC/4DLC cards, this data must be assigned to the first LEN (Level 0) of each card.* *For 8DLC cards, this data must be assigned to the first LEN (Level 0) and fifth LEN (Level 4) of each card.* **Note 2:** *The same type of D$^{\text{term}}$s must be accommodated in the same DLC card.*	• YY=17 (1) X-XXXXXXXX: My Line No. (2) 0 : D$^{\text{term}}$ Series III (Soft Key is not available) 1 : D$^{\text{term}}$ Elite Terminal (Soft Key is available) 3◀ : D$^{\text{term}}$ Series E (Soft Key is available)
A		

	DESCRIPTION	**DATA**
A		
CM12	Specify the kind of D^{term}. **Note:** *After the second data of CM12 YY=24 is changed, pull out and reconnect the modular connector of the D^{term}.*	• YY=24 (1) X-XXXXXXXX: My Line No. (2) 0 : 24 Line/Trunk/Feature keys + 8/12 One Touch keys 7◀ : 16 Line/Trunk/Feature keys + 16/20 One Touch keys
CM90	Specify whether call termination on each line key is indicated on the Call Indicator Lamp or not.	• YY=05 (1) My Line No.+ $\boxed{,}$ + Key No. (2) 0 : Not indicated 1◀ : To indicate
CM08	Assign the Outgoing Call Preset/Answer Preset functions to D^{term}, if required.	(1) 145 (2) 0 : Available 1◀ : Not available
	Specify whether the answer key rings on TAS and Pooled Line or not.	(1) 116 (2) 0 : Available 1◀ : Not available
CM41	Specify the Delayed Ringing timing.	• Y=1 (1) 09 (2) 01-10: 2 sec. -20 sec. (2 sec. increments) If no data is set, the default setting is 10 sec.
CM30	Provide Trunk-Direct Appearances to the trunk number.	• YY=18 (1) 000-255: Trunk No. (2) 0: To provide
CM04	Select language to display on LCD. **(Series 2100 software required)** **INITIAL**	• YY=00 (1) 00 (2) 1 : English 2 : French 3 : Spanish 4 : Portuguese 7 ◀ : English
END		

To provide the Digital Single Line on D^{term}, do the following programming.

START	DESCRIPTION	DATA
CM12	Assign Service Restriction Class C to each station.	• YY=07 (1) X-XXXXXXXX: Station No. (2) 00-15◀: Service Restriction Class C
CM15	Disable Dial Tone Activation when pressing one-touch speed key while terminal is idle.	• YY=87 One-Touch activates DT when Terminal Idle (1) 00-15: Service Restriction Class C assigned by CM12 YY=07 (2) 0 : Remain Idle 1 ◀ : Off Hook and Dial Tone
CM90	Assign and delete feature keys. **Note:** *Use Key number 93 for Redial key. Use Key number 96 for Flash key.* Prime line should be assigned to Key 9. Digital Single Line is a D^{term} and can use any key assigned in CM90. However, the Digital Single Line Terminal has no LEDs, speaker, or microphone. Assign any features that can be used without these devices.	• YY=00 Key Data (1) X-XXXXXXXX: My Line No. + , + Key No. (2) F1100 - F1199: Station Speed Dialing 00-99 F1012 : CNF Conference key This key is required to program speed dial keys. F0069 : Last number redial (Key No. 93) F1004 : TRF Transfer key (Key No. 96)
CM93	Assign prime line to My Line.	(1) X-XXXXXXXX: My Line No. (2) X-XXXXXXXX: Prime Line
END		

Hardware Required

D^{term} and DLC card

Automatic Idle Return

Programming

	DESCRIPTION	DATA
START		
CM08	Provide the system with this feature.	(1) 172 (2) 1◀ : Available
END		

Hardware Required

D$^{\text{term}}$ and DLC card

Calling Name And Number Display

Programming

Refer to “ALPHANUMERIC DISPLAY”. See Page 11.

Hardware Required

D$^{\text{term}}$ and DLC card

Dynamic Dial Pad

Programming

Do the following programming to make an outgoing call. Press any key on the dial pad of a D^{term}, without pressing a Speaker key or going off hook.

	DESCRIPTION	DATA
START		
CM93	Assign a Prime line to the D^{term}.	(1) X-XXXXXXXX: My Line No. (2) X-XXXXXXXX: Station No.
CM12	Assign Service Restriction Class A to required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Dynamic Dial Pad in the Service Restriction Class A assigned by CM12 YY=02.	• YYY=120 (1) 00-15: Service Restriction Class A (2) 0: Allow
END		

Multiple Line Operation

Programming

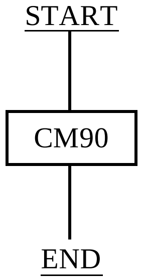
	DESCRIPTION	DATA
START		
CM90	Specify whether to enable ringing on call termination to flexible line keys and feature keys.	• YY=01 (1) My Line No. + $\boxed{,}$ + Key No. (2) 0 : Disabled 1◀ : Enabled
END		

Hardware Required

D^{term} and DLC card

Mute Key

Programming



DESCRIPTION	DATA
Assign the MUTE Key to the D^{term}.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F5013: MUTE Key

Hardware Required

D^{term} Series E and DLC card

Off-Hook Voice Announcement

Programming

START	DESCRIPTION	DATA
CM11	Assign the Virtual-Line station number for Off-Hook Voice Announcement.	(1) 000-255: Virtual LEN (2) CX-CXXXXXXXX: Virtual-Line station No. for Off-Hook Voice Announcement **Note:** *X-XXXXXXXX represents My Line No. of* D^{term}.
CM90	Assign the Virtual-line station for Off-Hook Voice Announcement to the required D^{term}.	• YY=00 (1) My Line No. + , + Key No. (2) CX-CXXXXXXXX: Virtual-Line station No. for Off-Hook Voice Announcement assigned by CM11
CM13	Provide the Off-Hook Voice Announcement to the required D^{term}. **INITIAL**	• YY=28 (1) X-XXXXXXXX: Station No. (2) 0 : Provided
CM08	Specify the Voice Call when calling a D^{term} set to Voice First from a Single Line Telephone or a D^{term} without LCD.	(1) 270 (2) 0 : Not provided (Busy Tone) 1◀ : Provided
	Specify the Voice Call when a called D^{term} goes off-hook while being called via Off-Hook Voice Announcement.	(1) 279 (2) 0 : Not provided (Ring Tone) 1◀ : Provided (Voice Call)
CM12	Assign the Service Restriction Class B to the required D^{term}.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ ZZ: 00-15◀: Service Restriction Class B
CM15	Allow Voice Call (called side) in the Service Restriction Class B assigned by CM12 YY=02.	• YY=67 (1) 00-15: Service Restriction Class B assigned by CM12 YY=02 (2) 1◀ : Available
A		

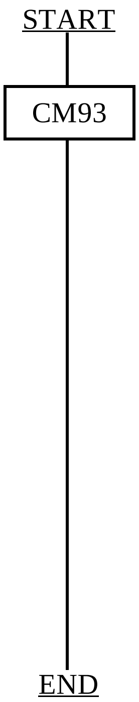
	DESCRIPTION	DATA
A		
CM12	Assign the Service Restriction Class C for Voice Call Mike Off (called side) to the required D^{term}.	• YY=07 (1) X-XXXXXXXX: My Line No. (2) 00-15◀: Service Restriction Class C
CM15	Allow Voice Call Mike Off (called side) in the Service Restriction C assigned by CM12 YY=07. **Note:** *This feature automatically turns the Microphone off at the called station.*	• YY=99 (1) 00-15:Service Restriction Class C assigned by CM12 YY=07 (2) 0 : Available
	Allow Automatic Hold in the Service Restriction Class B assigned by CM12 YY=02.	• YY=72 (1) 00-15: Service Restriction Class B assigned by CM12 YY=02 (2) 0 : Allow
CM20	Assign Voice Call/Ring Tone Programming access code.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A163
END		

Hardware Required

D^{term} and DLC card
APR or APA Unit

Prime Line Pickup

Programming



DESCRIPTION	DATA
Assign station or trunk to desired D^{term} station as Prime Line. It is recommended that the My Line be assigned as the Prime Line.	(1) X-XXXXXXXX: My Line No. (2) X-XXXXXXXX: Station No. **Note 1, Note 2** D000-D255 : Trunk No. **Note 1:** *My Line number or Virtual Line number can be assigned to the Prime Line. However, the data station and Single Line Telephone cannot be assigned to the Prime Line.* **Note 2:** *By loading the Resident System Program, the My Line number is assigned as Prime Line number for all D^{term}s.*

Hardware Required

D^{term} and DLC card

Recall Key

Programming

For internal call:

RECALL Key is initially assigned to all D^{term}s.

For outside call:

START

	DESCRIPTION	DATA
CM35	Assign the data for hook flash signal sending to the route number assigned by CM30 YY=00.	• YY=16 (1) 00-63:Trunk Route No. (2) 1◀ : Sending
CM90	Assign a Flash Over Trunk key to the required D^{term}.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F1009
CM41	Specify duration of the hook flash signal to trunks.	• Y=2 (1) 17 (2) 02-30 : 128-1920 msec. in 64 msec. increments If no data is set, default setting is 576-640 msec.

END

Hardware Required

D^{term} and DLC card

Relay Control Function Key

Programming

START

	DESCRIPTION	DATA
CM10	Assign the DK card to the required LEN. **Note 1:** *The DK card number must be assigned to the first LEN (Level 0) and the third LEN (Level 2) of each LT slot.* **Note 2:** *Circuit No. 3 of E831 is used for built-in External Equipment Interface of MP card by setting CM44.*	(1) 000-763: LEN (2) E800-E831: DK Card No. For PIM 0/1: E800-E807 For PIM 2/3: E808-E815 For PIM 4/5: E816-E823 For PIM 6/7: E824-E831
CM44	Assign the function of relay control via D^{term} to the DK.	(1) XX Y XX : 00-31: DK Card No. E800-E831 assigned by CM10 Y : 0-3: Circuit No. 313 : MP Built-in External Equipment Interface (2) 15 00 : Relay Control (On/Off) Function Key via D^{term}
CM90	Assign the Relay Control (ON/OFF) key on the required D^{term}.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F7 XX Z XX : 00-31: DK Card No. assigned by CM44 Z : 0-3: Circuit No. assigned by CM44

END

Hardware Required

DK card or MP card (built-in DK)
External equipment provided locally
D^{term} and DLC card
ATTCON/DESKCON and DLC card

Ring Frequency Control

Programming

To control the ring frequency by system data programming:

START	DESCRIPTION	DATA
CM08	Enable the frequency control by system data programming. INITIAL	(1) 390 (2) 1◀ : As per CM15 YY=83, 84, 93, CM35 YY=34, 164
CM12	Assign Service Restriction Class C to each station.	• YY=07 (1) X-XXXXXXXX: Station No. (2) 00-15◀: Service Restriction Class C
CM15	Specify the ring frequency of the D^{term} in the Service Restriction Class C assigned by CM12 YY=07. **(Series 2200 R3.1 software required)**	• YY=83, 84, 93 (1) 00-15: Service Restriction Class C assigned by CM12 YY=07 (2) See the table below.

YY=83	YY=84	YY=93: 0	YY=93: 1◀
0	0	1024 [Hz]	480 + 606 [Hz]/16 [Hz] Modulating Signal
0	1◀	1024 + 1285 [Hz]	480 + 606 [Hz]/8 [Hz] Modulating Signal
1◀	0	1200 [Hz]	1024 + 1285 [Hz]/16 [Hz] Modulating Signal
1◀	1◀	500 [Hz]	600 + 700 [Hz]/16 [Hz] Modulating Signal

CM35	Specify the ring frequency of the D^{term} to each trunk route. **(Series 2200 R3.1 software required)**	• YY=34, 164 (1) 00-63: Trunk Route No. (2) See the table below.

YY=34	YYY=164: 0	YYY=164: 1◀
0	1024 [Hz]	1024 + 1285 [Hz]/16 [Hz] Modulating Signal
1	1024 +1285 [Hz]	480 + 606 [Hz]/8 [Hz] Modulating Signal
2	1200 [Hz]	600 + 700 [Hz]/16 [Hz] Modulating Signal
3◀	500 [Hz]	480 + 606 [Hz]/16 [Hz] Modulating Signal

A

	DESCRIPTION	DATA
A		
CM76	Specify the ring frequency of the D^{term} on DID calls. For this assignment, do not set CM76 YY=23 to 7 (As per CM35 YYY=34/164). **[Series 2200 (R3.1) software required]**	• YY=23 (1) 000-999: Number Conversion Block No. assigned by CM76 YY=00/90 (2) 0: 1024 + 1285 [Hz]/16 [Hz] Modulating Signal 1: 480 + 606 [Hz]/8 [Hz] Modulating Signal 2: 600 + 700 [Hz]/16 [Hz] Modulating Signal 3: 1024 [Hz] 4: 500 [Hz] 5: 1200 [Hz] 6: 1024 + 1285 [Hz]
END		

To control the ring frequency at the D^{term}:

	DESCRIPTION	DATA
START		
CM08	Disable ring frequency by system data programming. **INITIAL**	(1) 390 (2) 0: By pressing feature key and dialing 3 (1) 262 (2) 0: Available
END		

Hardware Required

D^{term} and DLC card

Ringing Line Pickup

Programming

	DESCRIPTION	DATA
START		
CM12	Assign the Service Restriction Class C for Ringing Line Pickup.	• YY=07 (1) X-XXXXXXXX: My Line No. (2) 00-15◀: Service Restriction Class C
CM15	Allow Ringing Line Pickup in the Service Restriction Class C assigned by CM12 YY=07.	• YY=82 (1) 00-15 : Service Restriction Class C assigned by CM12 YY=07 (2) 0 : Allow
	Assign the Service Restriction Class C for Ringing-Line Pickup by Speaker key, if required.	• YY=86 (1) 00-15 : Service Restriction Class C assigned by CM12 YY=07 (2) 0 : Ringing Line Pickup by Speaker key is provided
END		

Hardware Required

D^{term} and DLC card

Soft Key

Programming

	DESCRIPTION	DATA
START		
CM12	Specify whether Soft Key feature is available to each D^{term}.	• YY=22 (1) X-XXXXXXXX: My Line No. (2) 0◀ : Available
	Assign Soft Key Pattern number to each D^{term}.	• YY=23 (1) X-XXXXXXXX: My Line No. (2) 0 : Pattern No. 0 1 : Pattern No. 1 2 : Pattern No. 2 3◀ : Pattern No. 3
A		

A

CM9A

DESCRIPTION	DATA
Assign the function of each Soft Key on each status of the D^{term}. To the 2nd data of this command, the 2nd data (F0XXX, F1XXX, F50XX) of CM90 should be assigned except for Scroll key data (F5002). The LCD shows a maximum of 4 Soft Keys at once. If assigning more than 4 Soft Keys on one status, it is necessary to assign Scroll key at every 4 keys (on first through fourth display). **Note 1:** *Scroll key must be assigned as a key for each active display.* **Note 2:** *Help key is only available in Pattern No. 3.* **Note 3:** *For the Pattern No. 3, the initial Soft Key data for NEAXMail AD-8 live recording is assigned. See the following section.* **Note 4:** *Pattern No. 3 is fixed.* **Note 5:** *For Dial By Name assignment, refer to DIAL BY NAME. See Page 187.*	• YY=00-03 Soft Key Pattern No. 0-3 assigned by CM12 YY=23 (1) aa bb aa: 00-15: Status No. 00: Idle State 01: During dialing (Holding no call) 02: During dialing (Holding station/ trunk) 03: During calling (Holding no call) 04: During calling (Holding station/ trunk) 05: Being called 06: When called party is busy (Holding no call) 07: When called party is busy (Holding station/trunk) 08: When called party sets DND 09: Trunk Busy 10: During Speaking (Holding no call) 11: During Speaking (Holding station/trunk) 12: During live recording/after live recording to NEAXMail AD-8 **Note 3** 13-15: Not used bb: Soft Key No. 00-15 00-03: Indicated on 1st display 04-07: Indicated on 2nd display 08-11: Indicated on 3rd display 12-15: Indicated on 4th display (2) F5002 : Scroll key to change Soft Key Indication XXXXX: Setting of each function (Same as “F0XXX, F1XXX, F50XX” of CM90)
Assign the characters indicated on each status of the D^{term}, corresponding to the Soft Key function assigned by CM9A YY=00-03.	• YY=10-13 Soft Key Pattern No. 0-3 assigned by CM12 YY=23 (1) Same as YY=00-03 (2) Soft Key name indicated on LCD (Max. 12 characters) *See APPENDIX B: CHARACTER CODE TABLE.*

END

To provide the Soft Keys for NEAXMail AD-8 live recording, assign the following data.

START

	DESCRIPTION	DATA

CM90

Provide the Record key on the feature key of the D$^{\text{term}}$.

- YY=00

(1) My Line No. + $\boxed{,}$ + Key No.
(2) F1091: Record

CM9A

Assign the function of each Soft Key for NEAXMail AD-8 live recording.

Note: *For the Pattern No. 3, the initial Soft Key data for NEAXMail AD-8 live recording is assigned as follows.*

CM9A YY=03		CM9A YY=13 INDICATION
1ST DATA	2ND DATA	
1200	F1096 (Address)	Addrs
1201	F1092 (Pause)	Pause
1202	F1094 (End)	End
1203	F5002 (Scroll)	>>>>
1204	F1093 (Re-record)	ReRec
1205	F1095 (Erase)	Erase
1206	F1017 (MIC)	MIC
1207	F5002 (Scroll)	>>>>
1208	F1097 (Urgent Page)	Urgnt
1209	NONE	
1210	NONE	
1211	F5002 (Scroll)	>>>>

- YY=00-03 Soft Key Pattern No. 0-3 assigned by CM12 YY=23

(1) 12 bb
bb: 00-15: Soft Key No.
    00-03: Indicated on 1st display
    04-07: Indicated on 2nd display
    08-11: Indicated on 3rd display
    12-15: Indicated on 4th display
(2) F1092: Pause
F1093: Re-record
F1094: End
F1095: Erase
F1096: Address
F1097: Urgent Page

- YY=10-13 Soft Key Pattern No. 0-3 assigned by CM12 YY=23

(1) Same as YY=00-03
(2) Soft Key name indicated on LCD (Max. 12 characters)
See APPENDIX B: CHARACTER CODE TABLE.

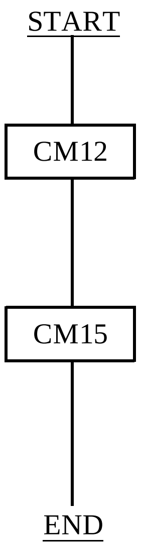
END

Hardware Required

D$^{\text{term}}$ with Soft Keys and DLC card

Volume Control

Programming



	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A to each station.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow or restrict the system to keep the volume level changed by the volume button on D^{term}, after the call is finished. **(Series 2100 software required)**	• YYY=135 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 0 : Allow 1◀: Restricted

Hardware Required

D^{term} and DLC card

REMOTE HOLD

Programming

Remote Hold from a D^{term}:

START	DESCRIPTION	DATA
CM12	Assign Service Restriction Class A to each station.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Remote Hold in the Service Restriction Class A assigned by CM12 YY=02.	• YYY=124 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 0: Allow
CM41	Specify the recall timing for Remote Hold.	• Y=0 (1) 06 (2) 01-98: 4 sec.-392 sec. (4 sec. increments) 99 : Recall is not performed If no data is set, the default setting is 236-240 sec.
CM90	Assign a Hold key to the D^{term}.	• YY=00 (1) My Line No. + , + Key No. (2) F1010
END		

Remote Hold from an ATTCON/DESKCON: **(Series 2100 software required)**

START	DESCRIPTION	DATA
CM08	Provide Remote Hold from ATTCON/ DESKCON service.	(1) 705 (2) 0: Available
CM41	Specify the recall timing for Remote Hold from ATTCON/DESKCON.	• Y=0 (1) 00 (2) 00-14: 2.4 sec.-33.6 sec. (2.4 sec. increments) 15-24: 38.4 sec.-124.8 sec. (9.6 sec. increments) If no data is set, default setting is 31.2-33.6 sec.
END		

RETURN MESSAGE SCHEDULE DISPLAY

Programming

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A for setting a Return Message Schedule.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Return Message Schedule Display in the Service Restriction A assigned by CM12 YY=02.	• YY=19 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM08	Assign whether the call to a station, set for Return Message Schedule Display, gets ringing or Reorder Tone.	(1) 334 (2) 0: Available (Ringing) 1◀ : Not available (ROT Connection)
CM20	Assign an access code for Return Message Schedule set and cancel, respectively.	• Y=0-3 Number Plan Group 0-3 (1) X-XXXX: Access Code (#8) (2) A154: Return Message Schedule Display Set A023: Return Message Schedule Display Cancel
END		

Hardware Required

D^{term} with LCD and DLC card

ROUTE ADVANCE

Programming

START

	DESCRIPTION	DATA
CM20	Assign the access code to Route Advance Block 00-31.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Route Advance Access Code (2) 200-231: Route Advance Block 00-31
CM22	Specify the alternative routes with the order of priority to be seized. Up to seven alternative routes can be set by using two Route Advance Blocks, as shown below.	• YY=00-31 Route Advance Block assigned by CM20>200-231 (1) 0-3: Order of Priority 0: 1st 1: 2nd 2: 3rd 3: 4th (2) 100-163: Trunk Route 00-63 200-231: Route Advance Block 00-31

	PRIORITY	ROUTE	DATA		
Route Advance Block 00	0	00	100	1st	
	1	01	101	2nd	
	2	02	102	3rd	
	3		201	←	To Route Advance Block 01
Route Advance Block 01	0	03	103	4th	
	1	04	104	5th	
	2	05	105	6th	
	3	06	106	7th	

END

SAVE AND REPEAT

Programming

START	DESCRIPTION	DATA
CM90	Assign the SAVE & REPEAT key to the D^{term}. **Note:** *Up to three Save and Repeat keys can be assigned per D^{term}.*	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F1001, F1013, F1014
END		

Hardware Required

D^{term} and DLC card

SECURITY ALARM

Programming

START	DESCRIPTION	DATA
CM12	Assign the Hot Line to the station connected to the contact.	• YY=03 (1) X-XXXXXXXX: Station No. (2) 04: Hot Line
CM52	Assign the Attendant Console as the Hot Line destination of the station.	• YY=00-99 Hot Line Pair No. (1) 0: Calling Side (2) X-XXXXXXXX: Station No. associated with the contact closure (1) 1: Called Side (2) E00X X: 0-7: ATTCON No. assigned by CM10
END		

SET RELOCATION

Programming

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A for Set Relocation to the required station.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15 ◄: Service Restriction Class A
CM15	Allow Set Relocation (Setting Side).	• YYY=131 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 0 : Allow
	Allow being moved and changed by Set Relocation operation.	• YYY=132 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 0 : Allow
CM20	Assign the access code for Authorization Code.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A086
CM2A	Set the Authorization Code for Service Restriction Class A assigned by CM15 YYY=131.	**Note:** *For setting the Authorization Code, refer to AUTHORIZATION CODE.*
CM20	Assign the access code for Set Relocation.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A196
END		

SOFTWARE LINE APPEARANCE

Programming

START

	DESCRIPTION	DATA
CM11	Assign a Software Line Appearance (Virtual Line station number) to the required Virtual LEN.	(1) 000-255: Virtual LEN (2) X-XXXXXXXX: Virtua1 Line Station No.

The Virtual LEN has no relation with the physical LEN used in CM10. Therefore, any Virtual LEN can be assigned to each Virtual Line station number. However, the Virtual Line station number should be different from the Single Line number assigned by CM10.

	DESCRIPTION	DATA
CM12	Assign the Station Class data to each Virtual Line Station number.	• YY=01 Trunk Restriction Class • YY=02 Service Restriction Class • YY=03 Kind of Telephone • YY=04 Tenant Allocation (1) X-XXXXXXXX: Virtual Line Station No. (2) Refer to CLASS OF SERVICE.
CM90	Assign the Virtual Line station to a D^{term}. One Virtual Line station number may be assigned to multiple D^{term}s.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) X-XXXXXXXX: Virtual Line Station No.

END

Hardware Required

D^{term} and DLC card

STACK DIAL

Programming

START	DESCRIPTION	DATA
CM08	Specify whether Stack Dial is available for internal calls.	(1) 178 (2) 0 : Not available (Only available for external calls) 1◀ : Available
CM12	Assign Service Restriction Class C to the required stations.	• YY=07 (1) X-XXXXXXXX: Station No. (2) 00-15◀ : Service Restriction Class C
CM15	Allow the D^{term} LCD display service.	• YY=96 (1) 00-15 : Service Restriction Class C assigned by CM12 YY=07 (2) 1◀ : With LCD
CM90	Assign the Stack Dial/Redial/Speed Dialing key to each D^{term}.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F1000: Stack Dial/Redial/Speed Dialing
END		

To provide ATTCON/DESKCON with this feature:

START	DESCRIPTION	DATA
CM90	Assign the Stack Dial/Redial key to each ATTCON/DESKCON.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6121: Stack Dial/Last Number Redial
END		

Hardware Required

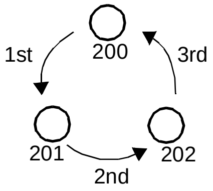
D^{term} with LCD and DLC card

ATTCON/DESKCON and DLC card

STATION HUNTING

Station Hunting-Circular

Programming

START	**DESCRIPTION**	**DATA**
CM18	To set up each Station Hunting group, assign station numbers, one by one, in order of the Hunting as shown below. **Example:** *For setting station number 200, 201, 202 into one Hunting group.*	• Y=0 (1) X-XXXXXXXX: Station No. to be included in Station Hunting Group (2) X-XXXXXXXX: Another Station No. to be linked
	1st Operation (1) 200 (2) 201 2nd Operation (1) 201 (2) 202 3rd Operation (1) 202 (2) 200 	
	Specify the Hunting capability of each station. To continue the hunt in the original direction, if the station is busy, set to “1”; to reverse the direction (last station only), set to “5”. **Note 1:** *The maximum number of stations per hunt group is 60. And there is no limit to the number of Circular Hunt groups within the system.* **Note 2:** *Each station can belong to only one hunt group.* **Note 3:** *The Attendant Console cannot be member of a hunt group.*	• Y=1 (1) X-XXXXXXXX: Station No. (2) 1: If busy, hunt in original direction 5: If busy, hunt in reverse direction
CM08	Allow or restrict the ability to set Station Hunting-Circular for a station with Do Not Disturb set.	(1) 240 (2) 0 : Allow 1◀ : Restricted
END		

Station Hunting-Terminal

Programming

START	DESCRIPTION	DATA
CM18	To set up each Station Hunting group, assign station numbers, one by one, as shown below. 1st Operation: (1) Station A, (2) Station B 2nd Operation: (1) Station B, (2) Station C	• Y=0 (1) X-XXXXXXXX: Station No. to be included in Station Hunting Group (2) X-XXXXXXXX: Another Station No. to be included in the Same Hunting Group
	Assign the pilot station to required station number within the Hunting group. For the member stations, set the data to “0”. **Note:** *The maximum number of stations that can be included on one Station Hunting group is 60 including the Pilot Station. And there is no limit to the number of Terminal Hunt groups within the system.*	• Y=1 (1) X-XXXXXXXX: Station No. (2) 0◀ : Member Station 1 : Pilot Station
CM08	Allow or restrict the ability to set Station Hunting-Terminal for a station with Do Not Disturb set.	(1) 240 (2) 0 : Allow 1◀ : Restricted
END		

Station Hunting-Secretarial

Programming

START

	DESCRIPTION	DATA
CM18	Assign a secretary station serial number to each Station Hunting group. **Note:** *A maximum of 31 stations can be members of the Secretarial Hunt group.*	• Y=2 (1) X-XXXXXXXX: Pilot Station No. (Terminal)/All Member Station No. (Circular) (2) 00-30: Secretary Station Serial No.
CM19	Assign a station number to each secretary station serial number assigned by CM18 Y=2.	• Y=0 (1) 00-30: Secretary Station Serial No. (2) X-XXXXXXXX: Secretary Station No.
	Specify the Hunting capability of each secretary station.	• Y=1 (1) 00-30 : Secretary Station Serial No. (2) 5: Hunting (As per CM19 Y=2) 7: No hunting
	Set up the order of Secretary Hunting. Assign secretary station serial numbers, one by one, in order of the desired Secretary Hunting, as shown below. 1st Operation [(1) Station Serial No. A (2) Station Serial No. B 2nd Operation [(1) Station Serial No. B (2) Station Serial No. C	• Y=2 (1) 00-30: Secretary Station Serial No. (A) (2) 00-30: Secretary Station Serial No. (B)
CM08	Allow or restrict the ability to set Station Hunting-Secretarial for a station with Do Not Disturb set.	(1) 240 (2) 0 : Allow 1◀ : Restricted

END

STATION MESSAGE DETAIL RECORDING (SMDR)

System Outline

The Station Message Detail Recording (SMDR) feature allows the system to send raw data of the trunk outgoing/incoming call information. The SMDR data can be received by a personal computer (PC) which runs an RS-232C terminal emulation software. This will be referred to in the rest of this manual as simply “SMDR terminal”.

The PBX provides two kinds of SMDR. One is the Main Processor (MP) built-in SMDR, and the other is the SMDR with Application Processor (AP00).

Call information is sent out from the MP or AP00 to the SMDR terminal when each call is completed. If the SMDR terminal is not connected to the system or if the SMDR terminal is not ready to receive information, the call information is temporarily stored in the MP or AP00. As soon as the SMDR terminal becomes ready to receive information, the call information temporarily stored in the MP or AP00 is sent out to the SMDR terminal.

(1) MP Built-in SMDR
The system outline of the Built-in SMDR is shown below. The Built-in SMDR consists of the MP and the external SMDR terminal.

- MP card:
  The MP stores various kinds of information on an event basis. When a call is completed, the MP sends out the call information pertaining to that specific call to the SMDR terminal.
  Two RS-232C ports can be used for the SMDR terminal interface.

  The MP keeps supervising the status of the SMDR terminal. If the SMDR terminal is not ready to receive information (Busy Status), the MP temporarily stores the call information into its internal memory.
  When the number of the call records stored in the MP reaches the maximum, new call records will be lost.

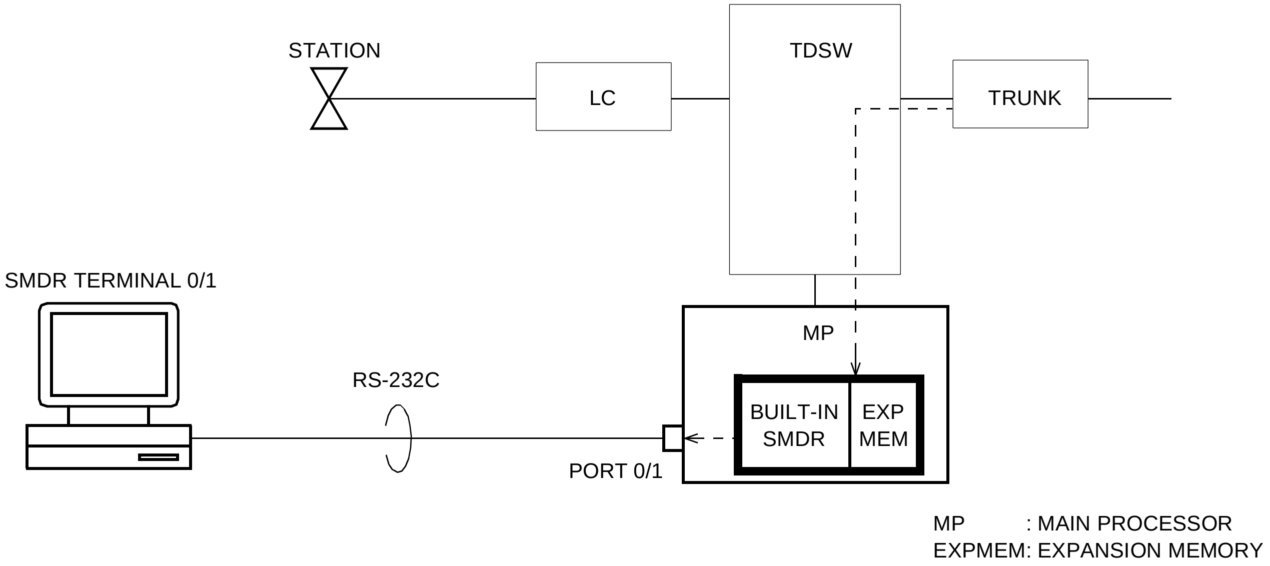
  The call record memory will be cleared by MP reset.

- SMDR Terminal:

  An Asynchronous Personal Computer is used as the SMDR terminal for receiving and processing the call information.

  The maximum number of SMDR terminal is two, which includes the number of Message Center Interface (MCI).

System Outline of MP Built-in SMDR



(2) SMDR with AP00

The System outline of the SMDR with AP00 is shown below.

The SMDR consists of the AP00 and the external SMDR terminal.

- AP (AP00):

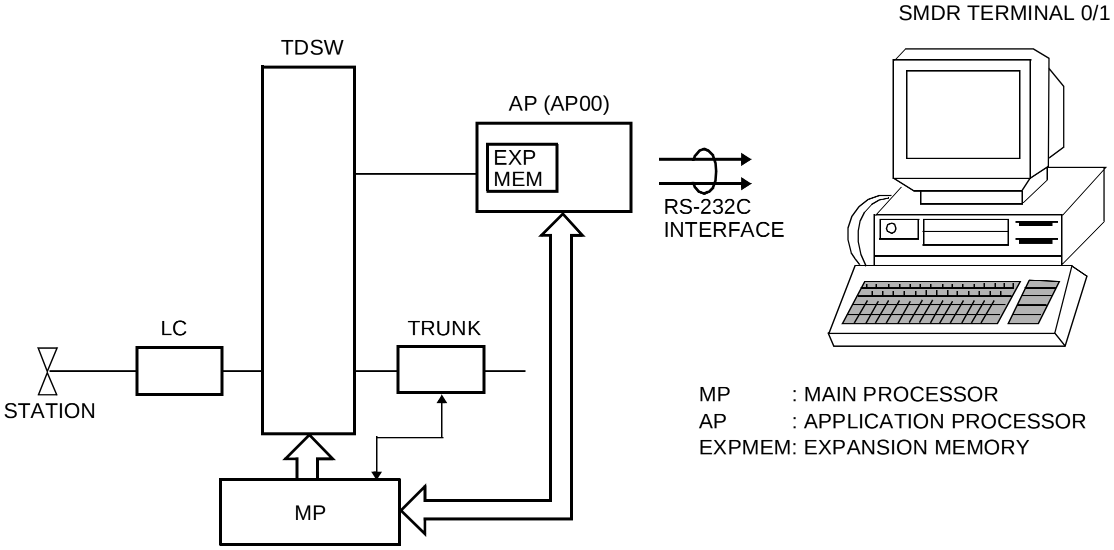
  The AP stores various kinds of information which arrives from the MP on an event basis. When a call is completed, the AP sends out the call information pertaining to that specific call to the SMDR terminal.

  Four of the AP (RS-232C) ports can be used for the SMDR terminal interface. The AP ports perform as DTE.

  The system can accommodate a maximum of one AP00 card.

- SMDR Terminal:
  Asynchronous PC is used as the SMDR terminal for receiving and processing the call information. The maximum number of SMDR terminal is two, which includes the number of Property Management System (PMS) terminal.

System Outline of SMDR with AP00



System Capacity

(1) MP Built-in SMDR

- The maximum of trunk calls simultaneously
  No EXPMEM card on MP provided: 64 trunk calls
  EXPMEM card on MP provided: 255 trunk calls
- The maximum of call record
  No EXPMEM card on MP provided: 256 call record
  EXPMEM card on MP provided: 1024 call record

(2) SMDR with AP00
Buffer Memory Capacity within AP00 card can store the following number of call information temporarily.

No EXPMEM card on AP00 provided		EXPMEM card on AP00 provided
When CMD001>179 is set to 0 (Not a center office of Centralized Billing-CCIS)	When CMD001>179 is set to other than 0 (Center office of Centralized Billing-CCIS)	27000
1600	800	

Hardware Required

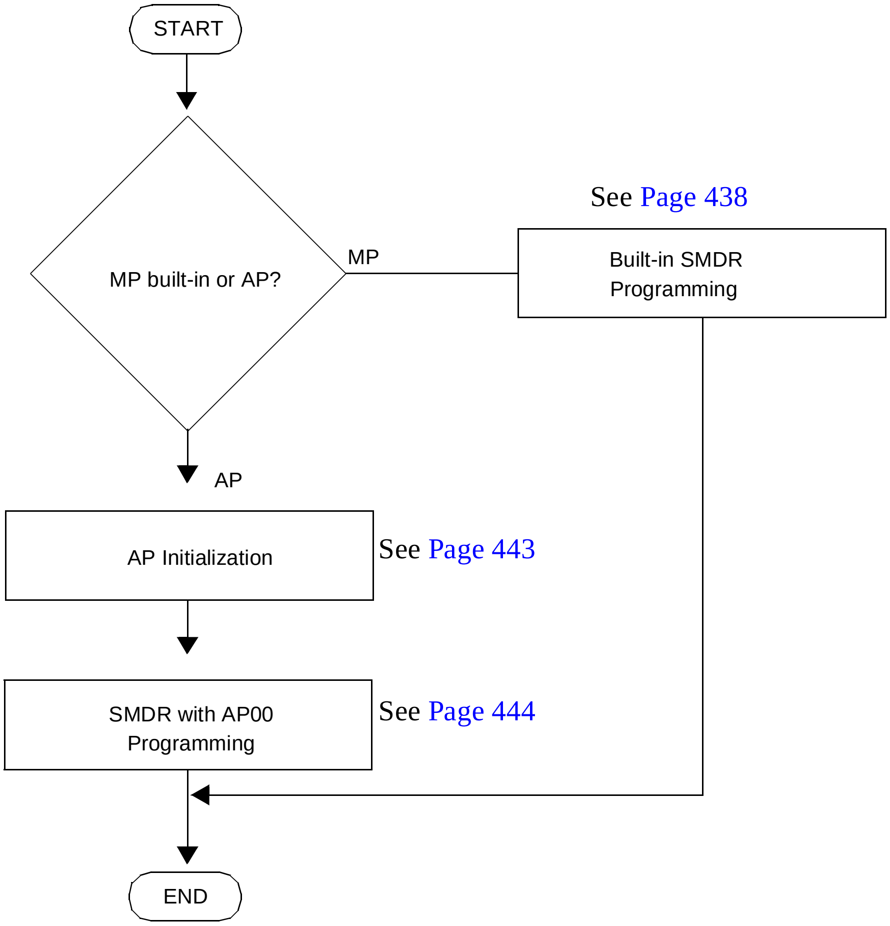
(1) MP Built-in SMDR

MP card
EXPMEM card (PZ-M537) on MP card if required
RS RVS-4SCA-C/RS RVS-15S CA-A or RS NORM-4S CA-A
SMDR terminal

(2) SMDR with AP00

AP00-B card
EXPMEM card (PZ-M537) on AP00 card if required
RS RVS-4SCA-C/RS RVS-15S CA-A or RS NORM-4S CA-A
SMDR terminal

Programming Summary for SMDR



See Page 438

See Page 443

See Page 444

Programming

Precaution

Before programming the system data for SMDR, confirm that the system is under the following status.

- The system is under On-Line mode. (“RUN” lamp is flashing on the MP card.)
- The AP00 card is mounted in the correct location. (for SMDR with AP00)
- All the system data pertaining to the station, trunks, and service features are already programmed.

Note: *The AP00-B card does not contain a Resident Program Load. Follow all SMDR programming.*

Station Number Data Loading

The AP00 stores the station number data loaded from the MP. When station numbers have been added, deleted or changed by CM10, the station number data must be reloaded to the AP00 by the following procedure.

(1) Flip the MB switch of the AP to UP position.

(2) Return the MB switch to DOWN position.

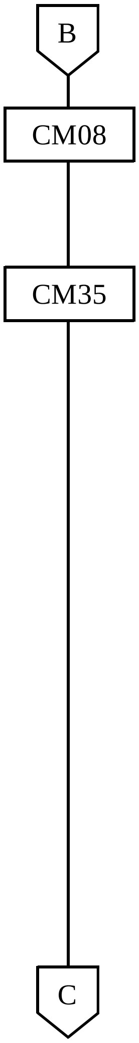
(3) The “**** AP00 START ****” message is printed if a printer is provided.

(4) The “SORT COMPLETE” message is printed when the station number has been sent to the AP.

Built-in SMDR Programming

START	DESCRIPTION	DATA
CM40	Specify the function for the RS-232C ports. **(Series 2100 software required)** **Note:** *When a port is used for Built-in SMDR, assign the 2nd data =14. When a port is used for both MCI and Built-in SMDR, assign the 2nd data =11.*	• YY=00 Function (1) 0 : Port 0 1 : Port 1 (2) 11 : MCI and Built-in SMDR 14 : Built-in SMDR
	Assign the attribute data for RS-232C ports according to the SMDR terminal specifications. **(Series 2100 software required)**	• YY=01 Data length (1) 0 : Port 0 1 : Port 1 (2) 0 : 7 bits 1◀: 8 bits • YY=02 Parity check (1) 0 : Port 0 1 : Port 1 (2) 0 : Effective 1◀: Ineffective • YY=03 Kind of parity (1) 0 : Port 0 1 : Port 1 (2) 0 : Even parity 1◀: Odd parity • YY=04 Stop bit (1) 0 : Port 0 1 : Port 1 (2) 0 : One-stop bit 1◀: Two-stop bits • YY=05 DTR signal (1) 0 : Port 0 1 : Port 1 (2) 0 : Low 1◀: High • YY=06 RTS signal (1) 0 : Port 0 1 : Port 1 (2) 0 : Low 1◀: High
A		

	DESCRIPTION	DATA
A		
CM40		• YY=08 Data speed (1) 0 : Port 0 1 : Port 1 (2) 1 : 1200 bps 2 : 2400 bps 3 : 4800 bps 4 : 9600 bps 5 : 19200 bps NONE◀: 9600 bps
CM13	Provide the SMDR service for outgoing calls to the required station.	• YY=06 (1) X-XXXXXXXX: Station No. (2) 1◀ : To provide
CM35	Provide the SMDR service for outgoing calls to the required trunk routes.	• YY=14 (1) 00-63: Trunk Route No. (2) 1◀ : To provide
	Assign a trunk access code sent to SMDR for outgoing calls.	• YY=44 (1) 00-63: Trunk Route No. (2) 00-99: Trunk access code
CM41	Specify the timing of SMDR valid call timer (pseudo-answer timer).	• Y=0 (1) 03: Pseudo-answer timer (2) 00-08: 8 sec.-40 sec. (4 sec. increments) If no data is set, the default data is 20-24 sec.
B		



DESCRIPTION	DATA
Specify the method of charging a transferred call. The following table shows the station to which call charging is to be made in the case of various transfer patterns.	(1) 424: Charging method (2) 0 : Charging to transferring station or destination station 1◀: Split charging to both transferring station and transfer destination station (1) 425: Charging destination (2) 0 : Charging to transferring station 1◀: Charging to transfer destination station

TRANSFER PATTERN		**CM08>424=1**	**CM08>424=0**	**CM08>424=0**
FROM	**TO**		**CM08>425=1**	**CM08>425=0**
STA A	STA B	Split charging to STA A and STA B	STA B	STA A
STA	ATT	STA	STA	STA
ATT	STA	STA	STA	STA
ATT A	ATT B	Split charging to ATT A and ATT B	ATT B	ATT A

STA: Station ATT: Attendant Console

For Incoming Call Record, do the following programming.

C

	DESCRIPTION	DATA
CM13	Provide the SMDR service for incoming calls to the required station.	• YY=05 (1) X-XXXXXXXX: Station No. (2) 0 : To provide 1◀ : Not provided
CM35	Provide the SMDR service for incoming calls to the required trunk routes.	• YY=49 (1) 00-63: Trunk Route No. (2) 0 : To provide 1◀ : Not provided
CM08	Specify whether the SMDR service is effective only for incoming calls with Account Code or not.	(1) 426: SMDR for incoming call (2) 0 : Effective for all incoming calls 1◀: Effective only for incoming calls with Account Code
	Specify whether the ANI/Caller ID is sent to SMDR. **Note 1:** *When providing incoming calls with ANI, assign this data in addition to the programming for AUTOMATIC NUMBER IDENTIFICATION (ANI). See Page 87.* **Note 2:** *When this data is assigned to 1, SMDR service for incoming calls is not provided even if CM13 YY=05 is 0 (To provide).*	(1) 463: ANI/Caller ID to SMDR (2) 0 : To send 1◀: Not sent

D

To provide SMDR for tandem calls, do the following programming.

D

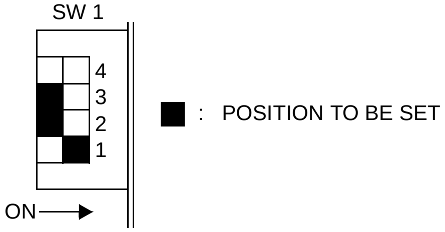
	DESCRIPTION	DATA
CM08	Provide the system with SMDR service for tandem calls.	(1) 040 (2) 0 : Available
	Specify whether the MP built-in SMDR output for tandem calls is divided into terminating trunk and originating trunk. **(Series 2100 software required)**	(1) 803 (2) 0 : To provide 1◀: Not provided (Originating trunk only)

END

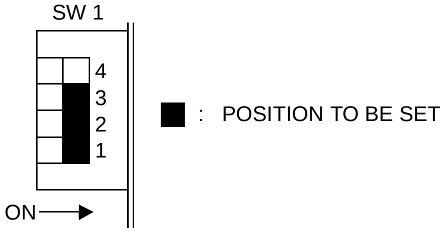
AP Initialization

This section explains the data assignment to make the AP active.
You can skip the data assignment explained on this section, if one of the following AP related feature has been activated; SMDR (Station Message Detail Recording), MCI (Message Center Interface), PMS (Property Management System), or Hotel printer. You can distinguish whether the AP is active or not by the RUN lamp indication. The RUN lamp flashes on green color when the AP is in active.
When you install the AP00 at first time, you should assign the data shown below.

START	DESCRIPTION	DATA
CM05	Assign an AP number to the AP00 card. The AP number must match the SENSE switch setting on the AP00 card. **INITIAL**	• Y=0 (1) 04-15, 20-31: AP No. (2) 04: AP00 card
	On the AP00 card, set SW1 switch as shown below.	SW1-4 should be set as follows; ON : The AP No. is 04-15 OFF: The AP No. is 20-31



	DESCRIPTION	DATA
CMD101	Load the initial data into the AP00 card. **AP OFF LINE**	(1) 0000 (2) CCC
	On the AP00 card, set the SW1 switch as shown below:	SW1-4 should be set as follows; ON : The AP No. is 04-15 OFF: The AP No. is 20-31



END

SMDR with AP00 Programming

START	DESCRIPTION	DATA
CM02	Assign the system clock data.	(1) 0: Calendar Year (2) 1999-2099 (1) 1: Date (2) MM DD WW MM : 01-12 (Month) DD : 01-31 (Date) WW: 00 (Sunday) 01 (Monday) 02 (Tuesday) 03 (Wednesday) 04 (Thursday) 05 (Friday) 06 (Saturday) (1) 2: Time (2) HH MM SS HH : 00-23 (Hour) MM: 00-59 (Minute) SS : 00-59 (Second)
CM13	Provide the SMDR service for outgoing calls to the required stations.	• YY=06 (1) X-XXXX: Station No. (2) 1◀: To provide
CM35	Provide the SMDR service for outgoing calls to the required trunk routes.	• YY=14 (1) 00-63: Trunk Route No. (2) 1◀: To provide
	Assign a Trunk Access Code for SMDR.	• YY=44 (1) 00-63: Trunk Route No. (2) 00-99: Trunk Access Code
A		

	DESCRIPTION	DATA
A		
CM41	Specify the timing of SMDR valid call timer (pseudo-answer timer).	• Y=0 (1) 03 (2) 00-08: 8 sec.-40 sec. (4 sec. increments) If no data is set, the default setting is 20-24 sec.
CMD000	Specify the contents of the detail call information to be sent to the SMDR.	(1) 60 (2) 0◀: Only the called party’s No. is sent out 1 : All the dial information inclusive of the access code is sent out
CMD001	Specify the method of charging a transferred call.	(1) 1 (2) 0◀: Split charging to both the transfer destination station and the transferring station 1 : Charging to transfer destination station 2 : Charging to transferring destination station
B		

B

DESCRIPTION	DATA
Assign the attribute data, depending on the port (Port 0-3) connected to the SMDR terminal.	(1) See the following table. (2) See the following table.

CMD001

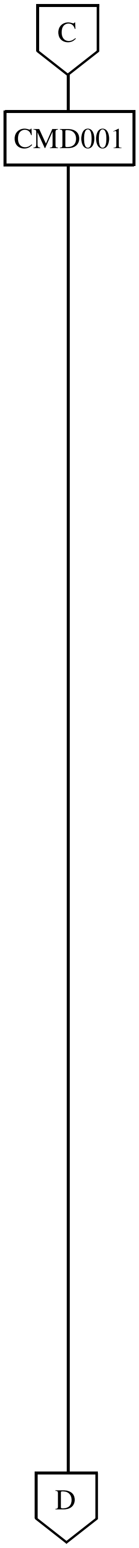
AP00 INITIAL

- For SMDR (NEAX 2400 IMS Format):

FIRST DATA (1)				MEANING	SECOND DATA (2)	MEANING
PORT 0	**PORT 1**	**PORT 2**	**PORT 3**			
20	24	28	32	Data Speed	2/3/4/5	1200 bps/2400 bps/4800 bps/ 9600 bps **Note**
21	25	29	33	Stop Bit Length	0/1/2	1 bit/1.5 bits/2 bits
22	26	30	34	Data Length	0/1	7 bits/8 bits
23	27	31	35	Parity	0/1/2	None Parity/Even Parity/Odd Parity
80	100	120	140	Function	4/5	Computer 0/Computer 1
81	101	121	141	Priority for Data Processing	0	1st
82	102	122	142	Message Format	3	NEAX 2400 IMS Format
84	104	124	144	Protocol	1	Free Wheel
85	105	125	145	Station Address (SA)	48	0
86	106	126	146	Unit Address (UA)	33	!

Note: *For Port 1 and Port 3, a data speed 9600 bps cannot be set.*

C



DESCRIPTION **DATA**

- For SMDR (NEAX1400 IMS Format):

FIRST DATA (1)				MEANING	SECOND DATA (2)	MEANING
PORT 0	PORT 1	PORT 2	PORT 3			
20	24	28	32	Data Speed	2/3/4/5	1200 bps/2400 bps/4800 bps/ 9600 bps **Note**
21	25	29	33	Stop Bit Length	0/1/2	1 bit/1.5 bits/2 bits
22	26	30	34	Data Length	0/1	7 bits/8 bits
23	27	31	35	Parity	0/1/2	None Parity/Even Parity/Odd Parity
80	100	120	140	Function	4/5	Computer 0/Computer 1
81	101	121	141	Priority for Data Processing	0	1st
82	102	122	142	Message Format	4	NEAX1400 IMS Format
84	104	124	144	Protocol	1	Free Wheel

Note: *For Port 1 and Port 3, a data speed 9600 bps cannot be set.*

If the masking of Authorization Codes sent to the SMDR terminal is required, assign the desired value to be added to the Authorization Code dialed.

For example:
To mask the Authorization Code “1234” by adding “5” to all digits:

(1) 160
(2) 5] 1st digit

(1) 162
(2) 5] 3rd digit

(1) 161
(2) 5] 2nd digit

(1) 163
(2) 5] 4th digit

With this assignment, “6789” is sent to SMDR Terminal.

(1) 160-175: Designation of digit to be masked: 1st digit-16th digit
(2) 0◀ : No masking
1-11: Value to be added to the designated digit of Authorization Code
12: Masking with “X”

D

	DESCRIPTION	DATA
CMD003	Assign maximum number of Call Record for SMDR which is set to “4” by CMD001>80/ 100/120/140.	(1) 29 (2) 0◀ : Not record 1-27000: 1 call-27000 calls

Note 1: *When the data is set to 1-27000, external alarm of memory overflow is available, if CM44, 2nd data = 3001 is assigned.*

Note 2: *The amount of call record number set by CMD003>23, 24, 25, 26, 28, 29, 30 must not exceed the following number.*

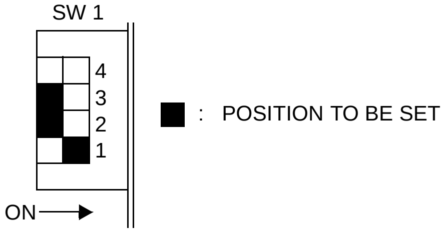
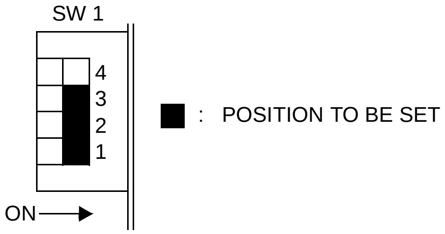
AMOUNT OF CALL RECORD NUMBERS OF CMD003 1ST DATA 23, 24, 25, 26, 28, 29, 30			
NO EXPMEM ON AP00 IS PROVIDED		**EXPMEM ON AP00 IS PROVIDED**	
When CMD001>179 is set to 0 (Not a center office of Centralized Billing-CCIS)	When CMD001>179 is set to other than 0 (Center office of Centralized Billing-CCIS)	When CMD003>28 is set to 0 (Call Record for CIS is not provided)	When CMD003>28 is set to other than 0 (Call Record for CIS is provided)
1600	800	27000	26000

Maximum number of each 1st data is as follows:

1ST DATA	NO EXPMEM ON AP00 IS PROVIDED	EXPMEM ON AP00 IS PROVIDED
23, 30	1000	1000
24, 25, 26, 29	1600	27000
28	1020	12000

Note 3: *CMD003>23, 24, 25, 26, 28, 29, 30 are effective after executing CMD102. Before executing CMD102, be sure to print out all stored call records. CMD102 deletes all of the stored call records.*

E

	DESCRIPTION	DATA
E		
CMD102	On the AP00 card, set SW1 switch as shown below.	
		SW1-4 should be set as follows; ON : The AP No. is 04-15 OFF: The AP No. is 20-31
	Clear the billing memory. **AP OFF LINE** **Note:** *Before executing CMD102, be sure to save/print out all of the stored call records.* *CMD102 deletes all of the stored records.*	(1) 0000 (2) CCC
	On the AP00 card, set the SW1 switch as shown below:	
		SW1-4 should be set as follows; ON : The AP No. is 04-15 OFF: The AP No. is 20-31
CMD000	The buffering method when the number of the stored SMDR information has reached to the predetermined value.	(1) 41 (2) 0◀: No new data is stored 1 : New data is stored by deleting the oldest data
CM44	The external alarm driver function for the SMDR buffer overflow.	(1) XX Y XX: 00-31: DK Card No. assigned by CM10 (E800-E831) Y : 0-3: Circuit No. (2) 3001: When CMD001>80/100/120/140 is set to “4” 3002: When CMD001>80/100/120/140 is set to “5”
CMD012	When sending the tenant information (00-63) to the SMDR terminal, assign a Group number to each station or Attendant Console.	(1) X-XXXX: Station No. (2) 000-063: Group No.
F		(1) 00-07 : ATTCON No. 0-7 (2) 000-063: Group No.

F

	DESCRIPTION	DATA
CMD015	Assign the Charging Station Class number to each station number.	(1) X-XXXX: Station No. (2) 00◀-15 : Station Class No.
CMD016	Specify the direction for sending detail information on C.O. outgoing calls.	(1) XX 16: Send detail information of C.O. outgoing calls to the PMS/SMDR terminal set to “4” by CMD001>80/100/120/140 XX : Service Class No. assigned by CMD015 (2) 0◀: Not sent 1 : To send
		(1) XX 17: Send detail information of C.O. outgoing calls to the SMDR terminal set to “5” by CMD001>80/100/120/140 XX : Service Class No. assigned by CMD015 (2) 0◀: Not sent 1 : To send
	Specify SMDR service for Tie Line calls, if needed.	(1) XX 21: Send detail information of Tie Line outgoing calls to the SMDR terminal set to “4” by CMD001>80/100/120/140 XX : Service Class No. assigned by CMD015 (2) 0◀: Not sent 1 : To send
		(1) XX 22: Send detail information of Tie Line outgoing calls to the SMDR terminal set to “5” by CMD001>80/100/120/140 XX : Service Class No. assigned by CMD015 (2) 0◀: Not sent 1 : To send

G

G

	DESCRIPTION	DATA
CMD026	Assign the Development Table number to outgoing trunk routes.	(1) 00-63: Trunk Route No. (2) 000◀-511: Development Table No.
CMD027	Specify the call information sending function to each dialed number.	(1) XXX Y XXX : 000-511: Development Table No. assigned by CMD026 Y : 0-9, A(*), B(#): Dialed Digit (2) XXX3: Refer to next digit assignment (XXX: 000-511: Next Development Table No.) 9◀ : Send to SMDR terminal
CMD033	Assign a Call Development Table number to each outgoing trunk route.	(1) 00-63: Trunk Route No. (2) 0◀-127: Call Development Table No.
CMD034	Assign the Type of Call for each dialed digit (0-9, A, B) on the basis of each Call Development Table number assigned by CMD033.	(1) XXX Y XXX : 000-127: Call Development Table No. assigned by CMD033 Y : 0-9, A(*), B(#): Dialed Digit (2) 11◀: Local call 21 : Toll call 31 : International call 91 : Tie Line call

H

To provide SMDR for incoming calls, do the following programming:

H

	DESCRIPTION	DATA
CM13	Provide SMDR service for incoming calls to the required stations.	• YY=05 (1) X-XXXX: Station No. (2) 0 : To provide 1◀: Not provided
CM35	Provide SMDR service for incoming calls to the required trunk routes.	• YY=49 (1) 00-63 : Trunk Route No. (2) 0◀ : To provide
CMD000	Specify SMDR service for incoming calls with (or regardless of) Account Code entry.	(1) 70 (2) 0◀ : Effective for incoming calls with Account Codes only 1 : Effective for all incoming calls

I

	DESCRIPTION	DATA
I		
CMD015	Provide the SMDR service for incoming calls by assigning an SMDR Service Class number (CMD015) and Feature activation for that Class (CMD016).	(1) X-XXXX: Station No. (2) 00◀-15: Service Class No.
CMD016		(1) XX 30: Send detail information of C.O./Tie Line incoming calls to the SMDR terminal set to “4” by CMD001>80/100/120/140 XX : Service Class No. assigned by CMD015 (2) 0◀: Not sent 1 : To send
		(1) XX 55: Send detail information of C.O./Tie Line incoming calls to the SMDR terminal set to “5” by CMD001>80/100/120/140 XX : Service Class No. assigned by CMD015 (2) 0◀: Not sent 1 : To send
J		

To provide SMDR for tandem calls, perform the following programming:

	DESCRIPTION	**DATA**
J		
CM08	Provide the system with SMDR service for tandem calls.	(1) 040 (2) 0: Available
CMD000	Specify the direction for sending detail information on tandem calls.	(1) 77: Send detail information of tandem calls to the SMDR terminal set to "4" by CMD001>80/100/120/140 (1) 78: Send detail information of tandem calls to the SMDR terminal set to "5" by CMD001>80/100/120/140 (2) 0◀: Not sent 1 : To send
	Specify the contents for tandem call information.	(1) 79 (2) 0◀: Only outgoing call information 1 : Both outgoing and incoming call information
END		

To provide SMDR with AP00 for 5-digit station number, perform the following programming:

Note 1: *The following programming is only available for the NEAX 2400 IMS format.*

Note 2: *Be sure to assign different numbers to the last 4 digits for each 5-digit station number.*

	DESCRIPTION	**DATA**
START		
CMD000	Specify the storing of 5-digit station number in station database of AP00.	(1) 252 (2) 1 : Store last 4 digits of 5-digit station number
	Add the fixed first digit to the last 4 digits of 5-digit station number on SMDR output.	(1) 71 (2) 1 : To add
CMD001	Specify the first digit number to be added to 5-digit station number.	(1) 189 (2) 0-9, A (*), B (#): Digit to be added
END		

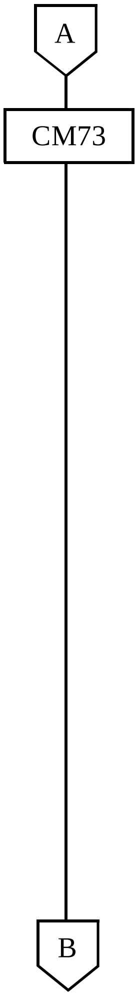
STATION SPEED DIALING

1. To provide Single Line Telephone or D^{term}:

START

	DESCRIPTION	DATA
CM12	Assign Service Restriction Class A to each station.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Station Speed Dialing in the Service Restriction Class A assigned by CM12 YY=02.	• YY=07 (1) 00-15: Service Restriction Class A (2) 1◀ : Allow
CM20	Assign access codes for Station Speed Dialing, Origination, Entry and Cancel, respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (#*, 7*, 7#) (2) A064: Origination A065: Entry A066: Cancel
CM08	Specify whether to provide Toll Restriction for an outgoing call by Station Speed Dialing.	(1) 035 (2) 0 : Not provided 1◀ : To provide
	Specify whether to set “#” dialing as paused data (1.5 sec.) or called number to C.O. line when DTMF station or D^{term} dials “#” in the setting of Station Speed Dialing feature.	(1) 168 (2) 0 : Paused data (1.5 sec.) 1◀ : Dialed digit
	Specify “*” dialing is set as programmable pause by CM41 Y=0>38 or dialed digit when the DTMF station or D^{term} dials “*” in the setting of the Station Speed Dialing feature.	(1) 171 (2) 0 : Programmable pause by CM41 Y=0>38 1◀ : Dialed digit
CM41	Assign the Programmable pause of Station Speed Dialing.	• Y=0 (1) 38 (2) 00-07: 1.5-12 sec. (1.5 sec. increments) If no data is set, the default setting is 1.5 sec.

A



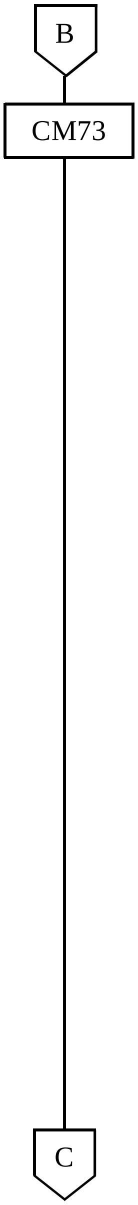
DESCRIPTION	DATA
Allocate the memory area for Station Speed Dialing to each station.	(1) X-XXXXXXXX: Station No. (2) W XX Y ZZ W : 0-3 (Basic), 4-9 (Option): 1000-Slot Memory Block No. XX: 00-99: Memory Start Block No. (10-Slot Memory Block) Y : Facility for programming the dialed number from the Station 0/1: Effective/Ineffective ZZ : 01-10: Number of 10-Slot Memory Blocks

Note: *1000-Slot Memory Block number 4-9 (6000 Memory Parcels) can be used when the Expansion Memory card (PZ-M537) is mounted on the MP card.*
For using this memory area, there are several conditions as mentioned below:

This memory area cannot be used for Speed Dialing with Speed Dialing keys provided by CM90: F11XX on a D^{term}, and also cannot be used for System Speed Dialing.

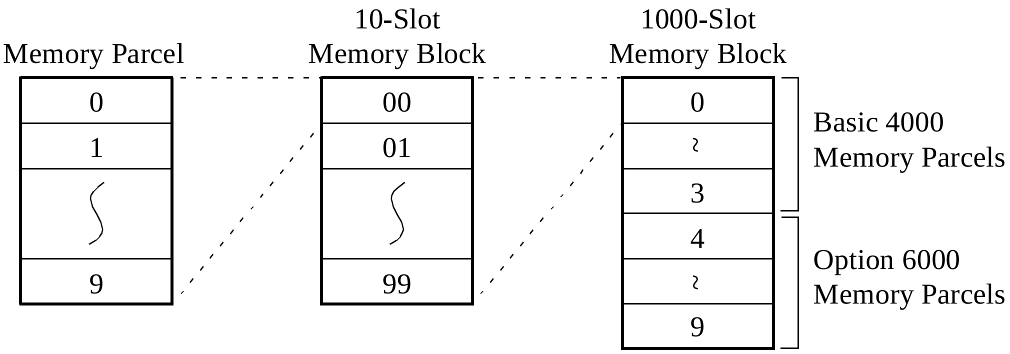
When exchanging the Expansion Memory card for another, data setting for this memory area must be reentered.

The Office Data in this memory area can be saved and loaded by MAT operations.



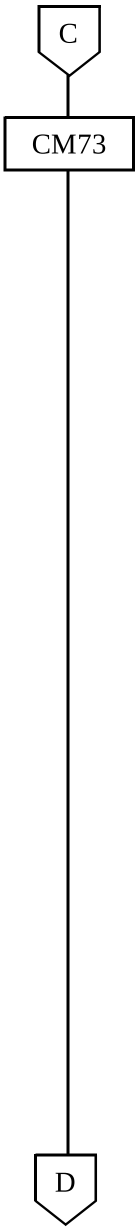
DESCRIPTION **DATA**

The memory area for storing one called number of Station Speed Dialing is called a “Memory Parcel”. An assembly of 10 Memory Parcels is called a “10-Slot Memory Block,” and one hundred 10-Slot Memory Blocks are called a “1000-Slot Memory Block”.



Example: *If the stored number intended is 10 for Station Number 300, 20 for Station Number 301, and 30 for Station Number 302, the memory areas assignment is as follows.*

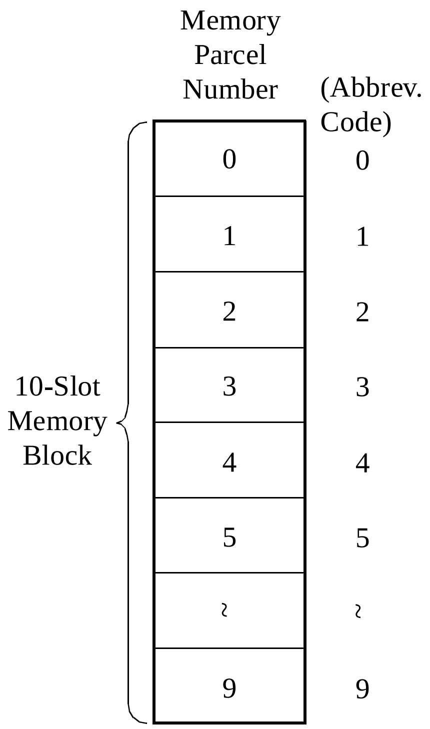
Station No.	*1000-Slot Memory Block No.*	*Memory Start Block No. (10-Slot Memory Block)*	*Number of 10-Slot Memory Block*
(1st Data)	*(2nd Data: W)*	*(2nd Data: XX)*	*(2nd Data: ZZ)*
300	*0*	*00*	*01*
301	*0*	*01*	*02*
302	*0*	*03*	*03*
303	*0*	*06*	*01*



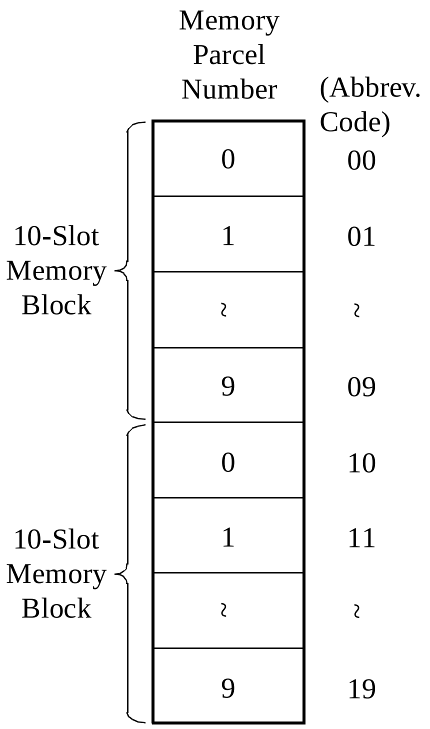
DESCRIPTION **DATA**

The abbreviated codes for this feature are automatically determined by assigning this command, on a station basis.
If the number of Memory Parcels per station does not exceed 10, then Abbreviated Code =0-9.
If the number of Memory Parcels per station exceeds 11, then Abbreviated Code =00-99.
The following figure shows the relation between Abbreviated Codes and Memory Parcels.

In the case of 10 Memory Parcels



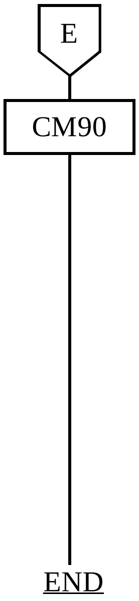
In the case of 20 Memory Parcels



D

	DESCRIPTION	DATA
CM74	Assign the number to be dialed to each Memory Slot number, if required. The numbers to be called are usually set from individual stations by their station users.	• Y=0 (1) X YY Z X : 0-3 (Basic), 4-9 (Option): 1000-Slot Memory Block No. YY : 00-99: 10-Slot Memory Block No. Z : 0-9: Memory Parcel No. (2) Stored No.: Outgoing Call Access Code (Max. 4 digits) + $\boxed{,}$ + Called Party’s No. (Max. 26 digits) To set a pause into the Stored No., enter “C” (Fixed Pause=1.5 sec.) or “D” (Programmable Pause specified by CM41 Y=0 >38) after desired digits.
	Assign the station name to be displayed to each Memory Slot number, by character codes or character.	• Y=1 (1) X YY Z X : 0-3 (Basic), 4-9 (Option): 1000-Slot Memory Block No. YY : 00-99: 10-Slot Memory Block No. Z : 0-9: Memory Parcel No. (2) XX...XX: Station Name Character Code (Max. 32 digits, 16 characters) See APPENDIX B: CHARACTER CODE TABLE.
		• Y=2 (1) X YY Z X : 0-3 (Basic), 4-9 (Option): 1000-Slot Memory Block No. YY : 00-99: 10-Slot Memory Block No. Z : 0-9: Memory Parcel No. (2) XX...XX:Station Name Character (Max. 16 characters)

E



DESCRIPTION	DATA
Assign Station Speed Dialing keys on each D^{term}, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F11XX XX: 00-99: Station Speed Dialing 00-99 **Note:** *The initial setting of key layout is for 16 Line/Trunk/Feature keys (Key No. 01-16).* *When using key No. 17-24, data setting of CM12 YY=24, 2nd data =0 is required.* *After the second data of CM YY=24 is changed, pull out and reconnect the modular connector of the D^{term}.*

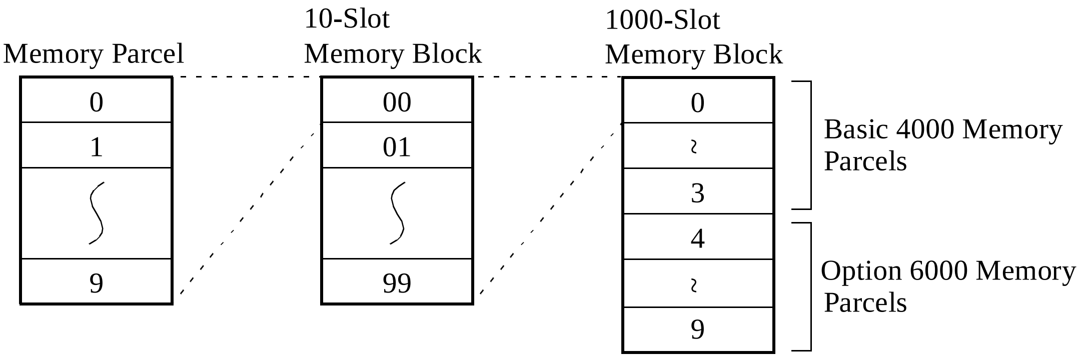
2. To provide D^{term} with One Touch keys:

START	DESCRIPTION	DATA
CM12	Assign Service Restriction Class A to each station.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX:00-15◀: Service Restriction Class A
CM15	Allow Station Speed Dialing in the Service Restriction Class A assigned by CM12 YY=02.	• YY=07 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM08	Specify whether to provide Toll Restriction for an outgoing call by Station Speed Dialing.	(1) 035 (2) 0 : Not provided 1◀ : To provide
	Specify whether to set "#" dialing as paused data (1.5 sec.) or called number to C.O. line when D^{term} dials "#" in the setting of Station Speed Dialing feature.	(1) 168 (2) 0 : Paused data (1.5 sec.) 1◀ : Dialed digit
	Specify whether to set "*" dialing as programmable pause by CM41 Y=0>38 or dialed digit when DTMF station or D^{term} dials "*" in the setting of Station Speed Dialing feature.	(1) 171 (2) 0 : Programmable pause by CM41 Y=0>38 1◀ : Dialed digit
CM41	Assign the pause for Station Speed Dialing.	• Y=0 (1) 38 (2) 00-07: 1.5-12 sec. (1.5 sec. increments) If no data is set, the default setting is 1.5 sec.
A		

A	DESCRIPTION	DATA
CM94	Allocate the memory area for Station Speed Dialing by D^{term} One Touch keys to each station. The memory block for storing one called number of Station Speed Dialing is called a "Memory Parcel". An assembly of 10 Memory Parcels is called a "10-Slot Memory Block," and one hundred 10-Slot Memory Blocks are called a "1000-Slot Memory Block".	(1) X-XXXXXXXX: My Line No. (2) W XX 0 ZZ W : 0-3 (Basic), 4-9 (Option): 1000-Slot Memory Block No. XX : 00-99: 10-Slot Memory Start Block No. ZZ : 01/02: Number of 10-Slot Memory Blocks (10 memories/20 memories)

Note 1: *Station Speed Dialing by dial access and by D^{term} One Touch keys uses the common memory area. Be sure to allocate the different memory area by CM94 from the memory area set by CM73.*

Note 2: *1000-Slot Memory Block number 4-9 can be used when the Expansion Memory card (PZ-M537) is mounted on the MP card.*
If the station is assigned to One Touch keys using this memory area, the lamp does not show the busy state.



END

3. To provide the One Touch key to send “Hooking Signal + Called Number” to a Centrex, set the following data in addition to the programming (2).

START

	DESCRIPTION	DATA
CM20	Assign the access code for sending of a Hooking signal to a Centrex. Maximum of two digits are available.	• Y=0-3 (1) X-XXXX: Access code (2) A158: Hooking signal to a Centrex
CM90	Assign a RECALL key on the D^{term}. RECALL key is used to return to a former line.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (90) (2) F1015: RECALL ◀
CM35	Provide Centrex trunk route with Centrex function.	• YY=86 (1) 00-63: Trunk Route No. (2) 0: Centrex

END

4. To provide the One Touch key to send “Called Number + DTMF Signal” for such as VMS operation, set the following data in addition to the programming (2), when the called number includes a trunk access code. If the called number includes no trunk access code, this data is not required.

START

	DESCRIPTION	DATA
CM08	Specify whether to set consecutive dialing “* #” as a delimiter between the called number and the DTMF signal.	(1) 448 (2) 0 : *# set as dialed digit 1 ◀ : Delimiter between called number and DTMF signal

END

STEP CALL

Programming

START	DESCRIPTION	DATA
CM08	Provide the system with the Step Call feature. **Note:** *This feature is mutually exclusive with the single digit feature access code.*	(1) 069: For internal Call (2) 1◀ : Available (1) 163: For Tie Line incoming call (2) 1◀ : Available (1) 208 **Note** (2) 1◀ : Not available
END		

SUPERVISORY CONTROL OF PERIPHERAL EQUIPMENT

Programming

START	DESCRIPTION	DATA
CM13	Provide the station connected to the peripheral equipment with momentary reversal/open capability.	• YY=22 (1) X-XXXXXXXX: Station No. (2) 0: To provide
CM41	Specify the duration of the momentary reversal/open.	• Y=1 (1) 08 (2) 01-10: 256-1408 msec. (128 msec. increments) If no data is set, the default setting is 256-384 msec.
END		

SYSTEM CLOCK SETUP BY STATION DIALING

(Series 2200 R3.1 software required)

Programming

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A to a required station.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀ : Service Restriction Class A
CM15	Allow System Clock Setup by Station Dialing in the Service Restriction Class A assigned by CM12 YY=02.	• YYY=130 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 0: Allow
CM20	Assign the access code for System Clock Setup by Station Dialing.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A197: System Clock Setup by Station Dialing
CM90	Assign a System Clock Setup by Station Dialing key to D^{term}, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0A97: System Clock Setup by Station Dialing
END		

SYSTEM SPEED DIALING

Programming

START

	DESCRIPTION	DATA
CM12	Assign Service Restriction Class A to each station.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow System Speed Dialing in the Service Restriction Class A assigned by CM12 YY=02.	• YY=06 System Speed Dialing (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the Access Code for System Speed Dialing.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (##) (2) A067: System Speed Dialing origination
CM90	Assign an access key for System Speed Dialing to the D^{term}s, as needed.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0067: System Speed Dialing origination (300-Slot Memory Block)

A

A

DESCRIPTION | **DATA**

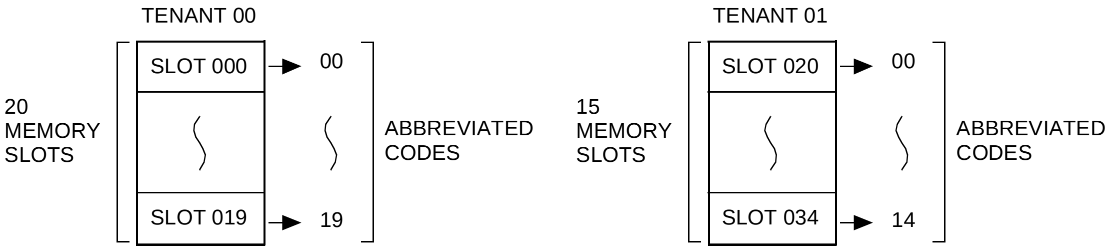
CM71

Allocate the memory block for System Speed Dialing. 300 memory slots are available per system. The number of slots available for each Tenant is also 300. Note that the memory blocks for Hot Line-Outside and Route Advance (from Tie Line to C.O. Line) are included in 300 memory slots.

Abbreviated Codes for this feature are automatically determined by assigning this command, on each Tenant as shown in the following example.

(1) 00-63 : For stations in Tenant 00-63
64 : For Attendant Console
(2) XXX YYY **Note**
XXX : 000-299: First Memory Slot No. in Block
YYY : 001-300: Number of Slots to be allocated in Block

For example, to provide 20 memory slots starting at Slot 60: Data: 060020



Note: *The Resident System Program allocates 100 memory slots to Tenant 01.*

CM72

Assign the station number to be called to the Memory Slot number allocated by CM71.

- Y=0

(1) 000-299: Memory Slot No.
(2) Stored No.:
Outgoing Access Code (Max. 4 digits) + $\boxed{,}$ + Called Party's No. (Max. 26 digits)
To set a pause into the Stored No., enter "C" (Fixed pause =1.5 sec.) or "D" (Programmable pause specified by CM41 Y=0>38) after desired digits (more than 2 digits).

Assign the station name for display, to the Memory Slot number allocated by CM71, by character codes or character.

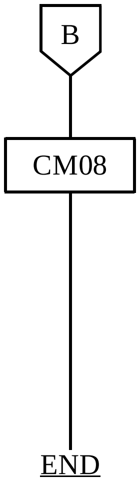
- Y=1

(1) 000-299 : Memory Slot No.
(2) XX...XX : Station Name Character Code
(Max. 32 digits, 16 characters) See APPENDIX B: CHARACTER CODE TABLE.

- Y=2

(1) 000-299 : Memory Slot No.
(2) XX...XX : Station Name Character (Max. 16 characters)

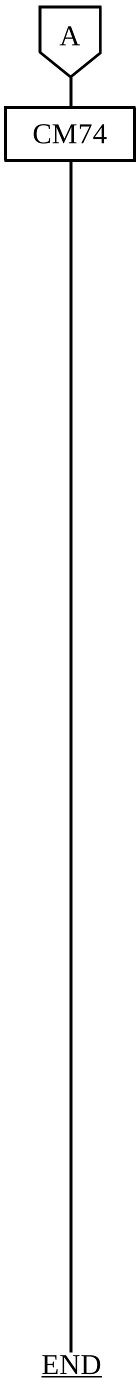
B



DESCRIPTION	DATA
Specify System Speed Dialing security. (Stored number displays on D^{term} for an outgoing call by System Speed Dialing.)	(1) 043 (2) 0 : Not displayed 1◀ : To display
Specify Toll Restriction for an outgoing call by System Speed Dialing, if required.	(1) 044 (2) 0 : Not provided 1◀ : To provide

To use the 1000-Slot Memory Block number (0-3) for Station Speed Dialing as the Memory Block for System Speed Dialing, add the following programming.

START	DESCRIPTION	DATA
CM08	Specify the 1000-Slot Memory Block number 0-3.	(1) 112: 1000-Slot Memory Block No. 0 (2) 0 : Available 1◀ : Not available (1) 111: 1000-Slot Memory Block No. 1 (2) 0 : Available 1◀ : Not available (1) 176: 1000-Slot Memory Block No. 2 (2) 0 : Available 1◀ : Not available (1) 110: 1000-Slot Memory Block No. 3 (2) 0 : Available 1◀ : Not available
CM20	Assign the Access Code for System Speed Dialing.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A152: 1000-Slot Memory Block No. 0 A151: 1000-Slot Memory Block No. 1 A068: 1000-Slot Memory Block No. 2 A150: 1000-Slot Memory Block No. 3
CM90	Assign an access key for System Speed Dialing to the D^{term}s, as needed.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0068: System Speed Dialing origination (1000-Slot Memory Block)
A		



DESCRIPTION	DATA
Assign the stored number to each Memory Slot number.	• Y=0 (1) X YY Z X : 0-3 (Basic), 4-9 (Option): 1000-Slot Memory Block No. YY : 00-99: 10-Slot Memory Block No. Z : 0-9: Memory Parcel No. (2) Stored No.: Outgoing Call Access Code (Max. 4 digits) + $\boxed{,}$ + Called Party's No. (Max. 26 digits) To set a pause into the stored No., enter "C" (Fixed Pause =1.5 sec.) or "D" (Programmable Pause specified by CM41 Y=0>38) after desired digits.
Assign the station name to be displayed to each Memory Slot number, by character codes or character.	• Y=1 (1) X YY Z X : 0-3 (Basic), 4-9 (Option): 1000-Slot Memory Block No. YY : 00-99: 10-Slot Memory Block No. Z : 0-9: Memory Parcel No. (2) XX...XX: Station Name Character Code (Max. 32 digits, 16 characters) See APPENDIX B: CHARACTER CODE TABLE.
	• Y=2 (1) X YY Z X : 0-3 (Basic), 4-9 (Option): 1000-Slot Memory Block No. YY : 00-99: 10-Slot Memory Block No. Z : 0-9: Memory Parcel No. (2) XX...XX: Station Name Character (Max. 16 characters)

TENANT SERVICE

Programming

START	DESCRIPTION	DATA
CM12	Assign a Tenant number to each station.	• YY=04 (1) X-XXXXXXXX: Station No. (2) 00: Tenant No. 00 01◀-63: Tenant No. 01-63
CM30	Assign a Tenant number to each trunk.	• YY=01 (1) 000-255: Trunk No. (2) 00: Tenant No. 00 01◀-63: Tenant No. 01-63
CM29	Assign a Numbering Plan Group number to each Tenant.	(1) 00-63: Tenant No. (2) 710-713: Numbering Plan Group 0-3
CM20	Assign required access codes for each Numbering Plan Group. To provide a trunk route for each Tenant, assign Tenant Block 00-23 to desired Trunk Route access code.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A000-A097 801-818 A100-A152 100-163 300-323: Tenant Block 00-23
CM23	When Tenant Block 00-23 is assigned by CM20, assign a trunk route and Tenant number to the Tenant Block.	• YY=00-23 Tenant Block 00-23 (1) 00-63: Tenant No. (2) 100-163: Trunk Route 00-63
CM10	When an External Key for Day/Night Mode change or Class of Service change is required, assign the DK card to required LEN. **Note:** *The DK card number must be assigned to the first LEN (level 0) and the third LEN (Level 2).*	(1) 000-763: LEN (2) E900-E963: DK Card No. For PIM 0/1: E900-E915 For PIM 2/3: E916-E931 For PIM 4/5: E932-E947 For PIM 6/7: E948-E963 **Note:** *Circuit No. 3 of E963 is used for built-in External Key Interface of MP card by setting CM61.*
A		

	DESCRIPTION	DATA
A		
CM61	To provide external keys for Day/Night Mode change or Class of Service change, assign a Tenant number to the DK card.	• YY=00 (1) XX Z XX: 00-31: DK Card No. assigned by CM10 (E900-E963) Z: 0-3: Circuit No. 633: MP Built-in External Key Interface (2) 00-63: Tenant No.
CM62	Specify the Tenants to be handled by each ATTCON Group. **INITIAL**	• Y=0-3 ATT Group 0-3 assigned by CM60 YY=00 (1) 00-63: Tenant No. (2) 0 : To handle 1◀ : Not handled
CM63	Specify whether Inter-Tenant connection is available for station to station calling, Incoming Call Termination and TAS answer.	• Y=0 TAS Answer (1) XX ZZ XX : Tenant No. of TAS Answer Station ZZ: Tenant No. of Trunk (2) 0 : Allow 1◀ : Restricted • Y=1 Station to Station Calling (1) XX ZZ XX : Tenant No. of Calling Station ZZ : Tenant No. of Called Station (2) 0 : Restricted 1◀ : Allow • Y=2 Incoming Call Termination (1) XX ZZ XX : Tenant No. of Called Station ZZ : Tenant No. of Trunk (2) 0 : Restricted 1◀ : Allow
END		

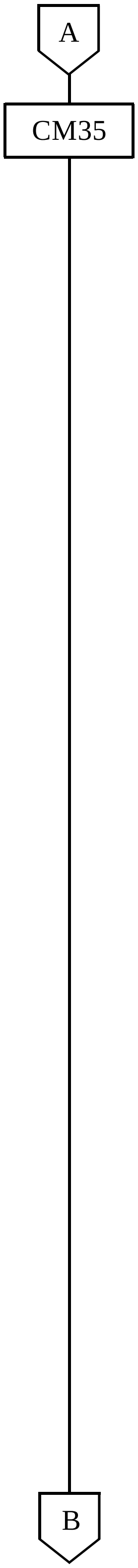
TIE LINES

Programming

START

	DESCRIPTION	DATA
CM10	Assign a trunk number for the ODT card to the required LEN. **Note:** *The trunk number must be assigned to the first LEN (Level 0) and the second LEN (Level 1) of each LT slot.*	(1) 000-763: LEN (2) D000-D255: Trunk No.
CM20	Assign a trunk route access code to each Tie Line trunk route.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (81/82) (2) 100-163: Trunk Route 00-63 (01/02)
CM30	Assign a trunk route and tenant number to each trunk.	• YY=00 (1) 000-255: Trunk No. (2) 00-63: Trunk Route No. (01/02) • YY=01 (1) 000-255: Trunk No. (2) 00-63: Tenant No. (00/00)
CM35	Assign trunk route data to the trunk route number assigned by CM30 YY=00. **Note:** *All circuits in one ODT card must be set to same type interface (2-wire or 4-wire).*	• YYY=105 2-wire E & M/4-wire E & M Trunk (1) 00-63: Trunk Route No. (2) 0:2-wire E & M Trunk 1◀ : 4-wire E & M Trunk • YYY=104 Polarity of E & M Trunk (1) 00-63: Trunk Route No. (2) 1 : E wire (Open), M wire (Open) 2 : E wire (Ground), M wire (Battery) 3◀ : E wire (Ground), M wire (Ground)

A



DESCRIPTION

Assign trunk route data to the trunk route number assigned by CM30 YY=00.

DATA

- YY=00 Kind of Trunk Route

(1) 00-63: Trunk Route No. (01/02)
(2) 04: Tie Line

- YY=01

(1) 00-63: Trunk Route No. (01/02)
(2)

		< Incoming >	< Outgoing >
2	:	DP-10PPS	DP-10PPS
4	:	DTMF	DTMF
7◀	:	DTMF/DP	DTMF

- YY=02 IC/OG

(1) 00-63: Trunk Route No. (01/02)
(2) 1 :Incoming trunk
2 :Outgoing trunk
3◀ :Bothway trunk

- YY=04 Answer Signal from distant office

(1) 00-63 :Trunk Route No. (01/02)
(2) 2 : Arrive
7◀ : Not arrive

- YY=05 Release Signal from distant office

(1) 00-63 :Trunk Route No. (01/02)
(2) 1◀ :Arrive

- YY=08 Sending of Dial Pulse

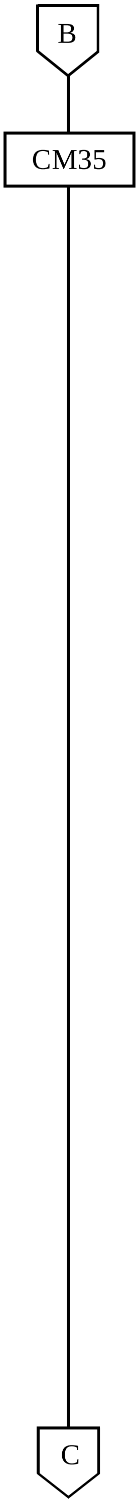
(1) 00-63 :Trunk Route No. (01/02)
(2) 3◀ :Send

- YY=09 Incoming Connection Signaling

(1) 00-63 :Trunk Route No. (01/02)
(2) 03: Wink Start
04: Delay Dial
05: Immediate Start
06: 2nd Dial Tone/Timing Start

- YY=10 2nd DT sending on call termination

(1) 00-63 :Trunk Route No. (01/02)
(2) 0 : No Tone
1◀ : 2nd Dial Tone



DESCRIPTION

DATA

- YY=13 Maximum Number of Sending Digits

(1) 00-63: Trunk Route No.
(2) 001-254: 1-254 digits

If no data is set, sender is released when time out occurs or the called station answers.

Assign the appropriate data for the characteristic of the distant PBX.

- YY=20 Sender start condition

(1) 00-63 : Trunk Route No. (01/02)
(2) 00 :Wink Start
01 :Delay Dial
15◀ :Timing Start (Prepause per CM35 YY=21)

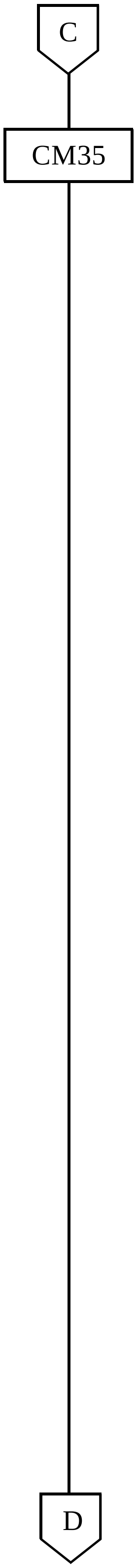
The above data should be set to each route according to the data for CM35 YY=09, as shown below.

Data for CM35 YY=09		Data for CM35 YY=20
03	→	00
04	→	01
05	→	15
06	→	15

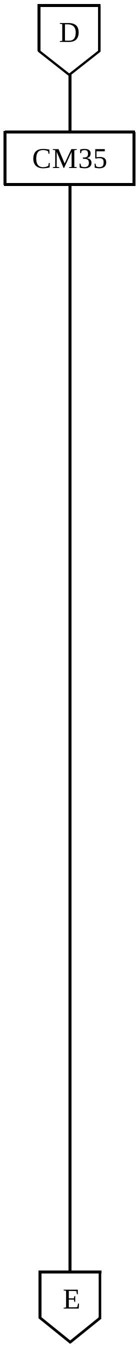
- YY=21 Sender Prepause Timing

(1) 00-63: Trunk Route No.
(2)

00	: 0 sec.	08	: 6.0 sec.
01	: 0.5 sec.	09	: 7.0 sec.
02	: 1.0 sec.	10	: 8.0 sec.
03	: 1.5 sec.	11	: 9.0 sec.
04	: 2.0 sec.	12	: 10.0 sec.
05	: 2.5 sec.	13	: 11.0 sec.
06	: 4.0 sec.	14	: 12.0 sec.
07	: 5.0 sec.	15◀	: 3.0 sec.



DESCRIPTION	DATA
When CM35 YY=01 is 2, assign the data for the DP Sender Characteristics.	• YY=23 DP Sender Inter Digital Pause (1) 00-63: Trunk Route No. (2) 0 : 300 ms. 1 : 400 ms. 2 : 500 ms. 3 : 600 ms. 4 : 700 ms. 5 : 900 ms. 6 : 1100 ms. 7◀ : 800 ms. • YY=25 DP Sender Make Ratio (1) 00-63: Trunk Route No. (2) 0 : 39% Make Ratio 1◀ : 33% Make Ratio • YY=45 DP Sender Release Timing (1) 00-63: Trunk Route No. (2) 0 : 2 sec. 1 : 4 seconds 2 : 6 seconds 3 : 8 seconds 4 : 12 seconds 5 : 14 seconds 6 : 16 seconds 7◀ : 10 seconds
When CM35 YY=01 is 4, assign data for the DTMF Sender Characteristics.	• YY=24 DTMF Sender Inter Digital Pause (1) 00-63: Trunk Route No. (2) 0 : 32 ms. 1 : 64 ms. 2 : 80 ms. 3 : 96 ms. 4 : 160 ms. 5 : 192 ms. 6 : 240 ms. 7◀ : 128 ms. • YY=26 DTMF Sender Signal Width (1) 00-63: Trunk Route No. (2) 0 : 64 ms. 1◀ : 128 ms.



DESCRIPTION	DATA
	• YY=46 DTMF Sender Release Timing (1) 00-63: Trunk Route No. (2) 0 : 2 seconds 1 : 4 seconds 2 : 6 seconds 3 : 8 seconds 4 : 12 seconds 5 : 14 seconds 6 : 16 seconds 7◀ : 10 seconds
Specify the desired Station Ringing Cadence and D$^{\text{term}}$ Tone Ringer.	• YY=33 Ringing Cadence (1) 00-63: Trunk Route No. (2) 2 : 1 sec. ON, 2 sec. OFF 3◀ : 2 sec. ON, 4 sec. OFF To make this data assignment effective enter the data “1” for CM08>180. • YY=34 D$^{\text{term}}$ Tone Ringer (1) 00-63: Trunk Route No. (2) 0 : 1024+1285×16 (Hz) 1 : 480+606×8 (Hz) 2 : 600+700 (Hz) 3◀ : 480+606×16 (Hz)

E

	DESCRIPTION	DATA
CM35	Specify the value of the Tie Line Pad of ODT card.	• YY=19 (1) 00-63: Trunk Route No. (2) 0-3:Programmable PAD (See CM42) 4-7◀ : Fixed PAD (See the following Table)

CONNECTION PATTERNS (A-B)	PAD DATA OF B TRUNK			
	DATA=4 (T/R)	DATA=5 (T/R)	DATA=6 (T/R)	DATA=7 (T/R)
Station-ODT			-3/-3	-3/-3
Tone-ODT			0/0	0/0
COT-ODT			-2/-2	0/0
ODT-ODT			0/0	0/0
DTI-ODT			0/0	0/0

T/R : Transmit/Receive
+ : Gain
- : Loss

CM42	When using the programmable PAD (CM35 YY=19, 2nd data =0-3), assign the PAD data.	(1) 50-65 (See the following Table) (2) 00-15 (See the following Table)

PATTERN / 1ST DATA (1)	PAD DATA PATTERNS				CONNECTING PATTERNS (A TRUNK- B TRUNK)
	CM35 YY=19 2ND DATA=0	CM35 YY=19 2ND DATA=1	CM35 YY=19 2ND DATA=2	CM35 YY=19 2ND DATA=3	
50 | 65	50	54	58	62	STA-ODT
	51	55	59	63	TONE-ODT
	52	56	60	64	COT-ODT
	53	57	61	65	ODT/DTI-ODT

F

F

DESCRIPTION | **DATA**

CM42

2ND DATA (2)	PATTERN	PAD DATA OF B TRUNK (T/R) [dB]		REMARKS
		4W E&M	2W E&M	
00 | 15	00	0/0	0/0	
	01	0/0	0/0	
	02	0/0	0/0	
	03	-2/-2	-3/-3	
	04	-3/-3	0/0	
	05	-12/-11	-6/-6	
	06	-16/-11	0/0	
	07	-6/-6	0/0	
	08 | 15	Not Used		

T/R : Transmit/Receive
+: Gain
-: Loss

CM63

Specify the restriction of incoming call termination to different tenants.

- Y=2

(1) XX ZZ
XX : Tenant No. of called station
ZZ : Tenant No. of Trunk Route
(2) 0 : Restricted
1◀ : Allowed

CM45

Provide DTMF Receivers for Tie Line incoming calls, if required.

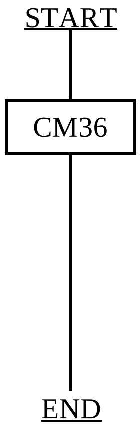
- Y=1

(1) XX Z : DTMF Receiver No.
XX : 00 (Built-in PBR on MP card)
01-15 (8RST Card No. assigned by CM10, E201-E215)
Z : 0-3: Circuit No.
(2) 0 : Only for Tie Line
1◀ : For both station and Tie Line

END

TIE LINE TANDEM SWITCHING

Programming



DESCRIPTION	DATA
Specify the combination of Trunk Routes allowing the Tandem connection. The incoming trunk route must provide a release signal for the Tandem Connection. (See CM35 YY=05)	• Y=0 (1) XX ZZ XX : 00-63: Incoming Trunk Route ZZ : 00-63: Outgoing Trunk Route (2) 0 :Allow 1◀ :Restricted

Hardware Required

ODT card

TIMED QUEUE

Programming

START	DESCRIPTION	DATA
CM41	Specify the timer data for this feature. If no data is set, the following data is applied: • Number of Call Attempts: 3 times • Interval Time of Call Attempt: 120 seconds -124 seconds • Duration of Calling: 28 seconds -32 seconds	• Y=0 (1) 35: Number of Times of Call Attempt (2) 01-07: Once-7 times If no data is set, the default setting is 3 times. (1) 36: Interval time of Call Attempt (2) 11-31: 48-124 sec. in 4 sec. increments If no data is set, the default setting is 120-124 seconds. (1) 37: Duration of Calling (2) 05-31: 20-124 sec. in 4 sec. increments If no data is set, the default setting is 28-32 seconds.
CM90	Assign the Call Back feature to the required key on the D^{term}s, as required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0004
END		

Hardware Required

D^{term} and DLC card

TIMED REMINDER

Programming

To provide the internal Music Source on the MP card:

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A for Timed Reminder to required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Timed Reminder in the Service Restriction Class A assigned by CM12 YY=02.	• YY=13 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for Timed Reminder set and cancel.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (5*, 5#) (2) A024: Timed Reminder Set A025: Timed Reminder Cancel
CM48	Designate the type of tone source to be connected when answering a Timed Reminder call.	• Y=1 (1) 00: Tone source of Timed Reminder (2) 1400: Hold Tone source on MP card
CM90	Assign the Timed Reminder feature access key to the D^{term}, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0024
CM08	Specify the timing for Timed Reminder Start.	(1) 228: Timed Reminder Start timing (2) 0 : At preset time 1◀ : Before 5 minutes of preset time
CM41	Specify the ringing duration of a Timed Reminder call.	• Y=0 (1) 23 (2) 01-08: 4 sec.-32 sec. (4 sec. increments) If no data is set, the default setting is 28-32 sec.

A

A

	DESCRIPTION	DATA
CM42	Specify the number of Timed Reminder attempts before abandonment.	(1) 03 (2) 01-05: Number of attempted Timed Reminder calls If no data is set, the default setting is 05.
	Specify the maximum number of Timed Reminder calls that can be set at the same time.	(1) 04 (2) 01-32: Max. number of stations If no data is set, the default setting is 10.

END

To provide an External Announcement Machine via COT card:

START

	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A for Timed Reminder to the required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Timed Reminder in the Service Restriction Class A assigned by CM12 YY=02.	• YY=13 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for Timed Reminder set and cancel.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (5*, 5#) (2) A024: Timed Reminder Set A025: Timed Reminder Cancel
CM10	Assign the COT card and DK card to the required LEN. **Note:** *The DK card number must be assigned to the first LEN (Level 0) and the third LEN (Level 2) of each LT slot.*	(1) 000-763: LEN (2) DB00-DB09: Interface Card No. for External Announcement Machine E800-E831: DK Card No. For PIM 0/1: E800-E807 For PIM 2/3: E808-E815 For PIM 4/5: E816-E823 For PIM 6/7: E824-E831 **Note:** *Circuit No. 3 of E831 is used for built-in External Equipment Interface on MP card by setting CM44.*

A

	DESCRIPTION	DATA
A		
CM44	Assign the External Announcement Machine start function to the DK card.	(1) XX Y XX: 00-31: DK Card No. assigned by CM10 (E800-E831) Y: 0-3: Circuit No. 313: MP built-in External Equipment Interface (2) 0100: External Announcement Machine for Timed Reminder Calling
CM90	Assign the Timed Reminder feature access key to the D^{term}s, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0024
CM08	Specify the timing for Timed Reminder start.	(1) 228: Timed Reminder start timing (2) 0: At preset time 1◀ : Before 5 minutes of preset time
CM41	Specify the ringing duration of a Timed Reminder call.	• Y=0 (1) 23 (2) 01-08: 4 sec.-32 sec. (4 sec. increments) If no data is set, the default setting is 28-32 sec.
	Specify the duration of a Timed Reminder call.	• Y=0 (1) 52 (2) 01-99: 4 sec.-396 sec. (4 sec. increments) If no data is set, the default setting is 60-64 sec.
CM42	Specify the number of Timed Reminder call attempts before abandonment.	(1) 03 (2) 01-05: Number of attempted Timed Reminder calls If no data is set, the default setting is 05.
END	Specify the maximum number of Timed Reminder calls that can be set at the same time.	(1) 04 (2) 01-32: Max. number of stations If no data is set, the default setting is 10.

To provide the internal announcement source by Digital Announcement Trunk (DAT card):

START	DESCRIPTION	DATA
CM10	Assign a Digital Announcement Trunk card number to the required LEN. To provide the restriction announcement for Timed Reminder call setting, assign the following DAT respectively. • DAT for Timed Reminder message • DAT for restriction announcement **Note:** *The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.*	(1) 000-763: LEN EB002-EB127: Digital Announcement Trunk Card No. For PIM 0/1: EB002-EB031 For PIM 2/3: EB032-EB063 For PIM 4/5: EB064-EB095 For PIM 6/7: EB096-EB127 **Note:** *EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.*
CM12	Assign the Service Restriction Class A for Timed Reminder set and cancel.	• YY=02 (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Timed Reminder in the Service Restriction Class A assigned by CM12 YY=02.	• YY=13 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀: Allow
CM20	Assign the access code for Timed Reminder set and cancel.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (5*, 5#) (2) A024: Timed Reminder Set A025: Timed Reminder Cancel
CM48	Designate the type of tone source to be connected when answering a Timed Reminder call.	• Y=1 (1) 00: Tone source of Timed Reminder (2) 0500: Digital Announcement Trunk
A		

A

	DESCRIPTION	DATA
CM49	Assign the function of the Digital Announcement Trunk card.	• YY=00 (1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk No. (EB002-EB127) assigned by CM10 (2) 0C XX: Answering Message on Timed Reminder XX: 00-63: Message No. • YY=08 (1) 00-63: Tenant No. (2) 00-63: Message No. assigned by CM49 YY=00
CM90	Assign the Timed Reminder feature access key to a D^{term}, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0024
CM08	Specify the timing for Timed Reminder start.	(1) 228: Timed Reminder start timing (2) 0: At preset time 1 ◀: Before 5 minutes of preset time
CM41	Specify the duration of a Timed Reminder call.	• Y=0 (1) 23: Timed Reminder call duration (2) 01-08: 4 sec.-32 sec.(4 sec. increments) If no data is set, the default setting is 28-32 sec.
	Specify the duration of message replay for Timed Reminder.	• Y=0 (1) 52 (2) 01-99: 4 sec.-396 sec.(4 sec. increments) If no data is set, the default setting is 60-64 sec.
CM42	Specify the number of Timed Reminder call attempts before abandonment.	(1) 03 (2) 01-05: Number of attempted Timed Reminder call If no data is set, the default setting is 05.
	Specify the maximum number of Timed Reminder calls that can be set at the same time.	(1) 04 (2) 01-32: Max. number of stations If no data is set, the default setting is 10.

B

	DESCRIPTION	DATA
B		
CM08	Specify the action when the number of Timed Reminder calls exceeds the maximum number assigned by CM42>04. **[Series 2300 (R4.1) software required]**	(1) 806 (2) 0: Restrict Timed Reminder call setting 1 ◀: Set to 5 or 10 minutes prior to preset time
CM49	Assign the restriction announcement for Timed Reminder to the DAT card or MP built-in DAT **[Series 2300 (R4.1) software required]**	• YY=00 (1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk No. (EB002-EB127) assigned by CM10 (2) 1900: Restriction Announcement for Timed Reminder
CM20	To record, replay, or delete a message, assign the appropriate Digital Announcement Trunk access code.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A100: Record A101: Replay A102: Delete
END		

Hardware Required

To provide the Internal Music Source:
MP card
To provide the External Announcement Machine:
COT card
DK card or MP card (built-in DK)
External Announcement Machine provided locally
To provide the internal digital announcement source:
DAT card or MP card (built-in DAT)

TRUNK-DIRECT APPEARANCES

Programming

	DESCRIPTION	DATA
START		
CM30	Assign the terminating system for required C.O. trunks to Trunk-Direct Appearances.	• YY=02 Day Mode • YY=03 Night Mode • YY=40 Mode A • YY=41 Mode B (1) 000-255: Trunk No. (2) 02: Trunk-Direct Appearance
	Provide the Trunk-Direct Appearances feature to the required C.O. trunk assigned by CM30 YY=02.	• YY=18 (1) 000-255: Trunk No. (2) 0: To provide
CM90	Assign the Trunk-Direct Appearances key to each D$^{\text{term}}$, as required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) D000-D255: Trunk No.
	Assign a Hold key for holding the Trunk-Direct Appearance call, to each D$^{\text{term}}$, as required. By this assignment, the held Trunk-Direct Appearance call can be transferred by voice call, and can be answered by the Trunk-Direct Appearance key on the destination station.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0058
CM08	Specify whether a Dial Tone is sent when the call is held by the Hold key for Trunk-Direct Appearance (CM90 YY=00>F0058).	(1) 365 (2) 0 : Send 1 ◀ : Not sent
	Specify whether Hold Transfer for a trunk line placed in Consultation Hold is available or not.	(1) 161 (2) 0 : Available (Hold Transfer) 1 ◀ : Not available (Consultation Hold)
END		

To provide enhanced Trunk-Direct Appearance:

START	DESCRIPTION	DATA
CM90	Program enhanced Hold key to each D^{term}.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0058: Hold Key
	Program Trunk Answer key.	(1) My Line No. + $\boxed{,}$ + Key No. (2) F0059: Trunk Answer Key
CM20	Assign Trunk Answer to be used for analog telephones.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A059: Trunk Answer
	Assign Trunk Hold to be used for analog telephones.	(1) X-XXXX: Access Code (2) A058: Trunk Hold
CM30	Assign ID code for each C.O. trunk.	• YY=19 (1) 000-255: Trunk No. (2) ABCD: Trunk ID code
CM08	Assign Answer preference.	(1) 114 (2) 0 : Answer by 2-digit Trunk ID code [Answer Code + Trunk ID Code (CD)] 1◀ : Answer by 4-digit Trunk ID code [Answer Code + Trunk ID Code (ABCD)]
CM51	Assign Hold Recall to alternate destination.	• YY=21 (1) 00-63: Tenant No. (2) X-XXXXXXXX: Station No.
END		

Note: *If the incoming call is routed via the Internal Automated Attendant feature (DAT card), the tenant number programmed in CM49 YY=01 must match the tenant number programmed in CM20 YY=01 for the incoming trunk.*

The table below shows the availability of the HOLD key (CM90 YY=00 > F0058) on each condition.

Trunk-Direct Appearances (CM30 YY=18)	Trunk ID Code Assignment (CM30 YY=19)	Kind of Trunks	Trunk ID Code Display	Availability of HOLD Key (CM90 YY=00 > F0058)
0 (Provide)	–	–	–	Available
1 (Not provided)	Not assigned	–	–	Not available
	Assign	CCIS trunk	–	Not available
		ISDN trunk	CM35 YYY=146 is set to 0. (Trunk ID Code is displayed.)	Available
			CM35 YYY=146 is set to 1. (Calling/called sub-address is displayed)	Not available
		Other trunks	CM35 YY=75 is set to 0. (DID incoming LDN is displayed.)	Not available
			CM35 YY=75 is set to 1. (Trunk ID Code is displayed.)	Available

Hardware Required

D^{term}, DLC card, and COT card

TRUNK QUEUING-OUTGOING

Programming

START

	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A for Trunk Queuing-Outgoing to the required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Trunk Queuing-Outgoing in the Service Restriction Class A assigned by CM12 YY=02.	• YY=02 (1) 00-15:Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ :Allow
CM20	Assign the access code for setting and resetting this service.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (*1, #1) (2) • If a different access code from Call Back is used. A000: Set A001: Reset • If the same access code as Call Back is used. A004: Set A005: Reset
CM90	Assign the Trunk Queuing-OG (Call Back) key to the required D^{term}.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0004
CM35	Specify the Trunk Queuing-Outgoing capability for each trunk route.	• YY=28 (1) 00-63: Trunk Route No. (2) 0 : Restricted 1◀ : Allow

END

TRUNK-TO-TRUNK CONNECTION

Programming

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class C to each station.	• YY=07 (1) X-XXXXXXXX: My Line No. (2) 00-15◀: Service Restriction Class C
CM15	Provide the switch hook flash capability during C.O. line connection, to the required stations.	• YY=90, 91 (1) 00-15: Service Restriction Class C assigned by CM12 YY=07 (2) 1◀ : Allow
CM36	Specify the combination of trunk routes allowing the Trunk to Trunk Connection.	• Y=0 (1) XX ZZ XX: 00-63: Incoming trunk route ZZ: 00-63: Outgoing trunk route (2) 0 : Allow 1◀ : Restricted
CM08	Provide the system with Ring Transfer for Call Transfer-All Calls to a trunk when a station holds another station or trunk.	(1) 253 (2) 0: Available
	Provide the system with forced release when a tandem call duration passes a predetermined time.	(1) 029 (2) 0 : To disconnect 1◀ : To continue
CM35	Allow or restrict forced release of tandem connection for the incoming trunk route. This data is available when CM08>029 is set to 0.	• YYY=119 (1) 00-63 : Trunk Route No. (2) 0 : Allow 1◀ : Restricted
CM41	Specify the forced release timing for tandem call.	• Y=0 (1) 54 (2) 01-06: 64-224 min. (32 min. increments) If no data is set, the default setting is 96-128 min.

A

	DESCRIPTION	DATA
A		
CM08	Provide the system with Trunk to Trunk Connection when no release signal arrives from the incoming trunk route and answer signal arrives from the outgoing trunk route.	(1) 324 (2) 0 : Available 1◀ : Not available
	Provide the system with Trunk to Trunk Connection transferred by a station or an attendant, when no answer signal arrives and release signal arrives from the outgoing trunk route.	(1) 028 (2) 0 : Available 1◀ : Not available
CM41	Specify the forced release timing for tandem connection when the called party does not answer. This data is available when no release signal arrives from incoming trunk route.	• Y=0 (1) 55 (2) 01-13: 12-60 sec. (4 sec. increments) If no data is set, the default setting is 20-24 sec.
END		

To provide the AMP trunk for Trunk to Trunk Connection:

START	DESCRIPTION	DATA
CM10	Assign the card number of the AMP trunk (AMP card). **Note:** *The AMP card number must be assigned to both of the first LEN (Level 0) and the third LEN (Level 2) of each slot.*	(1) 000-763: LEN (2) Card No. of AMP trunk For PIM 0/1: C100-C115 For PIM 2/3: C116-C131 For PIM 4/5: C132-C147 For PIM 6/7: C148-C163
CM38	Assign the AMP patterns to each combination of the trunk routes.	• YY=00 (1) XX ZZ XX: 00-63: Incoming trunk route ZZ: 00-63: Outgoing trunk route (2) 00-14 : AMP pattern No. 00-14 15◀ : Not use the AMP trunk
	Assign the gain value of each AMP pattern.	• YY=01 (1) 00-14: AMP pattern No. 00-14 (2) X Z X: AGC (Automatic Gain Control) 0 :0 dBr 1 : +4 dBr 2 : -4 dBr 3◀: Through (assigned by Fixed Gain) Z: Fixed Gain 0 : 12 dB 1 : 8 dB 2 : 4 dB 3◀: 0 dB
	Assign the Echo Canceller function to each AMP pattern.	• YY=02 (1) 00-14 : AMP pattern No. 00-14 (2) 0 : Through 1◀ : Normal
	Assign the Gain Controller of Echo Canceller to each AMP pattern.	• YY=03 (1) 00-14 : AMP pattern No. 00-14 (2) 0 : ON 1◀ : OFF
A		

A

	DESCRIPTION	DATA
CM38	Select the mode of Tone Disabler on each AMP pattern.	• YY=04 (1) 00-14: AMP pattern No. 00-14 (2) 0 : G164 1◀ : G165
	Specify the detect timing of Tone Disabler on each AMP pattern.	• YY=05 (1) 00-14: AMP pattern No. 00-14 (2) 0 : 0 seconds 1◀ : 2 seconds
	Specify the channels connected to each AMP pattern.	• YY=06 (1) 00-14: AMP pattern No. 00-14 (2) 0 : Incoming Route: Tie Line Outgoing Route: C.O. Line 1◀ : Incoming Route: C.O. Line Outgoing Route: Tie Line
	Specify the timing of AMP trunk connection on each AMP pattern.	• YY=07 (1) 00-14: AMP pattern No. 00-14 (2) 0 : When dialing is finished 1◀ : When answering

END

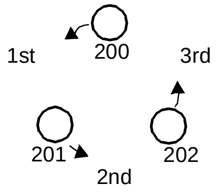
UNIFORM CALL DISTRIBUTION (UCD)

Programming

START

	DESCRIPTION	**DATA**
CM17	For each UCD group, assign station numbers, one by one, in the order of hunting. **Note:** *Up to 60 stations can be assigned into a single UCD group.* **Example:** *For setting station numbers 200, 201, 202 into one UCD group.*	• Y=0 (1) X-XXXXXXXX: Station No. (2) X-XXXXXXXX: Another station No. to be linked

1st Operation (1) 200
(2) 201
2nd Operation (1) 201
(2) 202
3rd Operation (1) 202
(2) 200



	Assign the Pilot station and Member station.	• Y=1 (1) X-XXXXXXXX: UCD Station No. (2) 0◀ : Member station 1 : Pilot station
	Assign the UCD group number.	• Y=2 (1) X-XXXXXXXX: UCD Station No. (2) 00-15: UCD Group 00-15
	Specify the UCD service for each type of call.	• Y=4 Internal Call (1) X-XXXXXXXX: Pilot Station No. of UCD group (2) 0 : Not provided 1◀ : Provide • Y=5 C.O. (DDD/FX/WATS) Incoming Call (1) X-XXXXXXXX: Pilot Station No. of UCD group (2) 0 : Not provided 1◀ : Provide

A

	DESCRIPTION	DATA
A		
CM17		• Y=6 Tie Line incoming call (1) X-XXXXXXXX: Pilot Station No. of UCD group (2) 0 : Not provided 1◀ : Provided • Y=7 DID/Automated Attendant Call (1) X-XXXXXXXX: Pilot Station No. of UCD group (2) 0 : Not provided 1◀ : Provided • Y=B Designation of number of queuing in each UCD group (1) X-XXXXXXXX: Pilot Station No. of UCD group (2) 0 : Provided (See CM42>16) 1◀ : Not provided (No limit)
CM42	Specify the maximum number of queuing in each UCD group.	(1) 16 (2) 01-99: Number of queuing in each UCD group If no data set, the default setting is No limit.
CM41	Specify the call waiting time before answer or abandonment for PEG Count analysis.	• Y=0 (1) 16 (2) 01-30: 4-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.
CM20	Assign the access code for UCD station Busy Out Set and Reset.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A044: Busy Out Set A045: Busy Out Reset
CM90	Assign the UCD Busy Out key on the D$^{\text{term}}$, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0044: UCD Busy Out
	Assign the Release key on the D$^{\text{term}}$, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F1020: Release
B		

	DESCRIPTION	DATA
B		
CM08	Specify the processing for an incoming call when all UCD stations are busy.	(1) 212 (2) 0 : Busy Tone Connection 1◀ : Queuing
	Specify the processing for a held call after setting the UCD Busy Out.	(1) 214: For the held call from Tie Line (2) 0 : Reconnected by Switch Hook Flash 1◀ : Disconnected (1) 215: For the held call from C.O. Line (2) 0 : Reconnected by Switch Hook Flash 1◀ : Disconnected
	Specify that the transferred C.O. call from a station or an attendant is placed into queuing mode when all UCD stations are busy. **Note:** *This data is only effective when CM08>212 is set to 1.*	(1) 227 (2) 0 : The call is placed into queuing mode **Note** 1◀ : Recall to the transferring station when the call is transferred from station, or Attendant Camp-On is set when the call is transferred from Attendant
	Enable the UCD Busy Out set and reset from the secondary extension.	(1) 442 (2) 0 : Available 1◀ : Not available
END		

Call Waiting Indication - UCD

To provide the LEDs on the D^{term} for UCD Call Waiting Indication:

Programming

START

	DESCRIPTION	DATA
CM08	Assign the incoming call to queuing mode when all UCD stations are busy.	(1) 212 (2) 1◀ : Queuing
CM42	Specify the maximum number of queuing in each UCD group for controlling call waiting lamp of a D^{term}.	(1) 15 (2) 01-99: Number of queuing in each UCD group If no data is set, the default setting is 01.

Note: *Depending on the number of queuing station/trunk, lamp indication pattern on a D^{term} is different as shown below:*

N=Number of queuing station/trunk

CONDITIONS	LAMP INDICATION
2nd Data=01	Steady on red irrespective of number of queuing station/trunk
1 ≤N < 2nd Data (2nd Data ≠ 01)	Steady on red
2nd Data ≤ N (2nd Data ≠ 01)	Flashing red

CM90	Assign the Call Waiting Indication LED to the required D^{term}.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F1280-F1295: UCD Group 0-15

END

To provide an external indicator for UCD Call Waiting:

START

	DESCRIPTION	DATA
CM08	Assign the incoming call to queuing mode when all UCD stations are busy.	(1) 212 (2) 1◀ : Queuing
CM42	Specify the maximum number of queuing in each UCD group for controlling external indicator.	(1) 15 (2) 01-99: Number of queuing in each UCD group If no data is set, the default setting is 01.

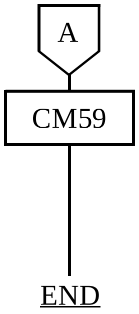
Note: *Depending on the number of queuing station/trunk, lamp indication pattern on the external indicator is different as shown below:*

N=Number of queuing station/trunk

CONDITIONS	LAMP INDICATION
2nd Data =01	Lamp on irrespective of number of queuing station/trunk (For the indication pattern, see CM59.)
N < 2nd Data (2nd Data ≠ 01)	Lamp off
2nd Data ≤N (2nd Data ≠ 01)	Lamp on (For the indication pattern, see CM59.)

	DESCRIPTION	DATA
CM10	Assign the DK card to the required LEN. **Note:** *The DK card number must be assigned to the first LEN (Level 0) and the third LEN (Level 2) of each LT slot.*	(1) 000-763: LEN (2) E800-E831: DK Card No. For PIM 0/1: E800-E807 For PIM 2/3: E808-E815 For PIM 4/5: E816-E823 For PIM 6/7: E824-E831 **Note:** *Circuit No. 3 of E831 is used for built-in External Equipment Interface on MP card by setting CM44.*
CM44	Set the function of UCD Call Waiting Indication to the DK.	(1) XX Y XX: 00-31: DK Card No. assigned by CM10 (E800-E831) Y : 0-3: Circuit No. 313: MP Built-in External Equipment Interface (2) 14XX XX: 00-15: UCD Group No. assigned by CM17

A



DESCRIPTION	DATA
Specify the UCD Call Waiting Indicator indication pattern.	(1) 00 (2) 01 : 30 IPM (1 sec. ON/OFF) 02 : 60 IPM (0.5 sec. ON/OFF) 03 : 120 IPM (0.25 sec. ON/OFF) 07 : Steady on NONE◀ : 120 IPM (0.25 sec. ON/OFF)

Delay Announcement - UCD

Programming

START

	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A for Digital Announcement Trunk Access (Record/Replay/Delete) to the required station.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Assign Digital Announcement Trunk Access in the Service Restriction Class A assigned by CM12 YY=02.	• YY=33 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM10	Assign a Digital Announcement Trunk card number to the required LEN. **Note:** *The Digital Announcement Trunk card No. must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of LT slot.*	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM 0/1: EB002-EB031 For PIM 2/3: EB032-EB063 For PIM 4/5: EB064-EB095 For PIM 6/7: EB096-EB127 **Note:** *EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.*
CM17	Specify the pattern of message sent to each UCD group.	• Y=A (1) X-XXXXXXXX: Pilot Station No. of UCD group (2) 0 : To send periodically 1◀ : To send only once
CM41	If the data for CM17 Y=A is "0", set the interval time for UCD Delay Announcement.	• Y=0 (1) 47 (2) 01-30: 4-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 sec.
	Specify the maximum UCD call waiting time before answer or abandonment for UCD PEG Count, and waiting time before UCD Delay Announcement.	• Y=0 (1) 16 (2) 01-30: 4-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.

A

A

	DESCRIPTION	DATA
CM49	Assign the UCD Delay Announcement function to the required Digital Announcement Trunk.	• YY=00 (1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk Card No. (EB002-EB127) assigned by CM10 (2) 0B0XX : UCD Delay Announcement 11XX : UCD Second Delay Announcement XX : 00-15: UCD group No.
CM20	To record, replay and delete a message, assign the Digital Announcement Trunk access code, respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access code (2) A100: Record A101: Replay A102: Delete
CM51	When transferring the call to a station or Attendant after the first interval time of UCD Delay Announcement, assign the destination.	• YY=17 (1) 00-63: Tenant No. (2) Destination: X-XXXXXXXX : Station No. E000 : Attendant Console
CM08	Specify a diversion display on a D^{term} or Attendant Console when transferring a UCD call.	(1) 357 (2) 0 : Available 1◀ : Not available

END

To set an outside party as the UCD overflow destination after the delay announcement:

[Series 2300 (R4.1) software required]

START	DESCRIPTION	DATA
CM17	Specify the pattern of message sent to each UCD group to send periodically.	• Y=A (1) X-XXXXXXXX: Pilot Station No. of UCD group (2) 0: To send periodically
CM51	When transferring the call to an outside party after the 1st interval time of UCD Delay Announcement, assign the destination.	• YY=17 (1) 00-63: Tenant No. (2) Destination: X-XXXXXXXX: Virtual Line Station No. assigned by CM11
CM11	Assign the Virtual Line station number to the required Virtual LEN.	(1) 000-255: Virtual LEN (2) X-XXXXXXXX: Virtual Line Station No.
CM12	Assign Service Restriction Class A to the Virtual Line station.	• YY=02 (1) X-XXXXXXXX: Virtual Line Station No. assigned by CM11 (2) XXZZ XX: 00-15◀ : Service Restriction Class A
CM15	Allow Call Forwarding-All Calls-Outside in the Service Restriction Class A assigned by CM12 YY=02.	• YY=26 (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CME6	Set Call Forwarding-All Calls-Outside to the Virtual Line station number assigned by CM11.	• YY=00 (1) X-XXXXXXXX: Virtual Line Station No. assigned by CM11 (2) Destination No.: X-XX + $\boxed{,}$ + YY...Y X-XX: Outgoing Trunk/LCR Group Access Code (1-2 digits) $\boxed{,}$: Separate Mark YY...Y: Called No. (Max. 26 digits)
A		

	DESCRIPTION	DATA
A		
CM35	To apply Call Forwarding-All Calls-Outside, set the trunk route combinations for Tandem Connection.	• YY=05 (1) 00-63: Trunk Route No. **Note** (2) 1◀ : Release signal arrives **Note**
CM36	**Note:** *For Resident System Programming, refer to the Command Manual.* .	• Y=0 (1) Incoming Trunk Route No. + Outgoing Trunk Route No. assigned by CM35 YY=05 (2) 0: Allow
END		

Hunt Past No Answer - UCD

Programming

Refer to CALL FORWARDING - NO ANSWER on Page 105.

Immediate Overflow - UCD

Programming

Refer to CALL FORWARDING - BUSY LINE on Page 103.

Priority Queuing - UCD

Programming

START	DESCRIPTION	DATA
CM35	Assign Priority Queuing per trunk route.	• YY=60 (1) 00-63: Trunk Route No. (2) 0: Provided 1◀ : Not provided
CM76	Assign Priority Queuing per DID incoming LDN, if Digit Conversion is provided (CM35 YY=18 is set to 0).	• YY=11 (1) 000-999: Number Conversion Block No. assigned by CM76 YY=00/90 (2) 0: Not provided 1◀ : Provided
END		

Queue Size Control - UCD

Programming

Refer to UNIFORM CALL DISTRIBUTION (UCD) on Page 497.

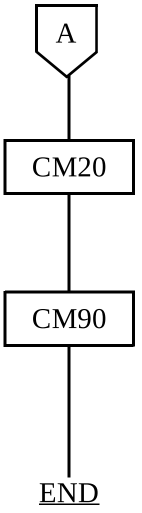
Silent Monitor - UCD

Programming

To monitor a UCD call, with or without a warning tone:

Note: *The use of monitoring, recording, or listening devices to eavesdrop, monitor, retrieve, or record telephone conversations or other sound activities, whether or not contemporaneous with its transmission, may be illegal in certain circumstances under federal or state laws. Legal advice should be sought prior to implementing any practice that monitors or records any telephone conversation. Some federal and state laws require some form of notification to all parties to the telephone conversation, such as using a beep tone or other notification methods or require the consent of all parties to the telephone conversation, prior to monitoring or recording a telephone conversation. Some of these laws incorporate strict penalties.*

START	DESCRIPTION	DATA
CM08	Specify the warning tone sent to connected parties in two-way calling when monitoring.	(1) 259 (2) 0: No tone 1◀ : One warning tone
CM12	Assign the Service Restriction Class A for monitoring stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow monitoring in the Service Restriction Class A assigned by CM12 YY=02.	• YYY=103 (1) 00-15 :Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ :Allow
CM12	Assign the Service Restriction Class A for monitored stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow being monitored in the Service Restriction Class A assigned by CM12 YY=02.	• YYY=104 (1) 00-15 :Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ :Allow
A		



DESCRIPTION	DATA
Assign the access code for monitor, if required.	• Y=0-3 Number Plan Group 0-3 (1) X-XXXX: Access Code (2) A033: Monitor
Assign a monitoring function key to the required D$^{\text{term}}$s.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0033: Monitoring

Hardware Required

To provide the delay announcement for UCD:
DAT card or MP card (built-in DAT)

To provide the LEDs on the D$^{\text{term}}$:
D$^{\text{term}}$ and DLC card

To provide the external Call Waiting Indicator:
DK card or MP (built-in External Equipment Interface)
External Indicator provided by the customer

Requirement for External Indicator:
Control Method: Ground/Battery (Maximum 125 mA)
Type: Visual and/or Audible type with volume control

UNIFORM NUMBERING PLAN (UNP) - VOICE AND DATA

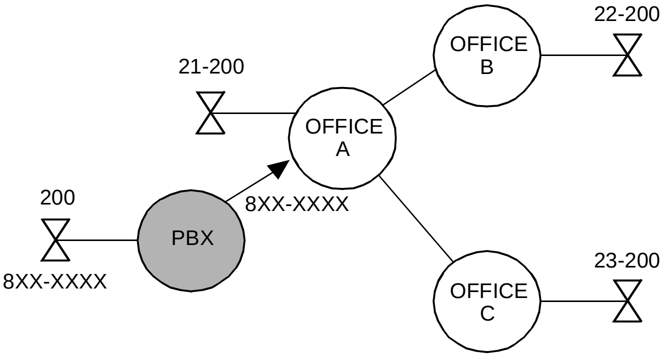
Programming

For an open numbering system:

START	DESCRIPTION	DATA
CM20	Assign an access code for LCR Group 0-3.	• Y=0-3 Numbering Group 0-3 (1) X-XXXX: Access Code (2) A126: LCR Group 0 A127: LCR Group 1 A128: LCR Group 2 A129: LCR Group 3
CM8A	Assign an Area Code Development Pattern number to each LCR Group.	• YYYY=A000 (1) 0-3: LCR Group 0-3 (2) 4005-4007:Area Code Development Pattern No. 5-7
	Assign a Route Pattern number to each area code for the Area Code Development Pattern number assigned by CM8A YYYY=A000.	• YYYY=4005-4007 Area Code Development Pattern No. 5-7 (1) NXX/1NXX: Area Code (Max. 8 digits) (2) 0000-0255: Route Pattern No. 000-255
	Assign an area code for Intra-office terminations, if required.	• YYYY=4005-4007 Area Code Development Pattern No. 5-7 (1) X-XXXXXXXX: Area Code (1-8 digits) (2) 8000 : Intra-office termination 8001-8008: 1-8 digits Intra-office station
	Specify the order of LCR selection for the Route Pattern number assigned by CM8A YYYY=4005-4007.	• YYYY=0000-0255 Route Pattern No. 000-255 (1) 1-4: Order of LCR Selection 1: 1st 2: 2nd 3: 3rd 4: 4th (2) XXX ZZ XXX: 000-255: LCR Pattern No. ZZ : 00-63: Trunk Route No.
A		

A	DESCRIPTION	DATA
CM8A	Assign the digits to be deleted from the calls to distant offices. To delete all digits of an area code:	• YYYY=5000-5255 LCR Pattern No. 000-255 (1) 151 :Deletion of all digits of area code (NXX, 1NXX) assigned by CM8A YYYY=4000-4007 (2) 0 :To delete
	To delete the designated digit of an area code:	• YYYY=5000-5255 (1) 153: Designation of digit to be deleted (2) 00 : No digits deleted 01-10: First digit deleted-First 10 digits deleted CCC : No digits deleted
	Assign the digits to be added to the digits sent to the distant office.	• YYYY=5000-5255 (1) 100: Designation of Digit Addition Pattern No. (2) 9000-9255: Digit Addition Pattern No. 000-255 CCC : No digits added • YYYY=9000-9255 Digit Addition Pattern No. 000-255 (1) 0 : Entry of digit code to be added (2) X-X...X: Digits to be added (Max. 32 digits) X =0-9, A (*), B (#), C (Fixed Pause), D (Programmable Pause)
CM35	Assign the digits to be added to the required trunk routes when adding digits to those received from a distant office.	• YY=17 (1) 00-63: Trunk Route No. (2) 00-09: Add “0” - Add “9” 10 : Add 2 digits per CM50 YY=00>0
	Assign the data for digit deletion to the required trunk routes for deleting the first one or two digits received from a distant office.	• YY=17 (1) 00-63: Trunk Route No. (2) 11: Delete first digit 12: Delete first 2 digits
CM50	If two digits are to be added (CM35 YY=17, 2nd data =10), assign the digits to be added.	• YY=00 (1) 0 (2) XX: Digits to be added
END		

Example 1: *When the PBX is an end office in a network employing an Open Numbering System, office A requires all the digits dialed on an incoming call from the PBX.*

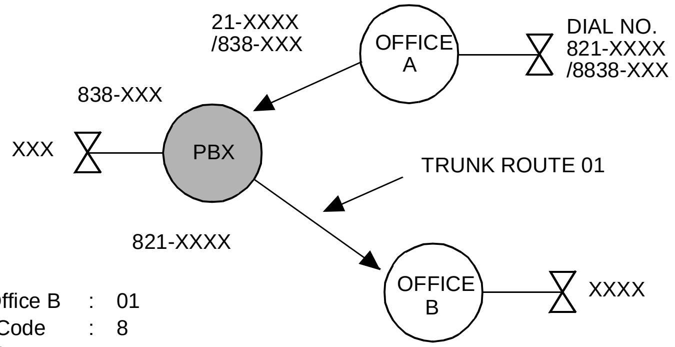


Trunk Route	:	0
Tie Line Access Code	:	8
Area Code of Office A	:	21
Area Code of Office B	:	22
Area Code of Office C	:	23
Numbering Plan Group	:	0

Programming for Example 1:

COMMAND CODE	1ST DATA	2ND DATA	REMARKS
20 Y=0	8	A126	Assignment of Access Code 8 of LCR Group 0.
8A YYYY=A000	0	4005	Assignment of Area Code Development Pattern No. 5.
8A YYYY=4005	21	0000	Assignment of Route Pattern No. 00 to Area Codes 21, 22, and 23.
8A YYYY=4005	22	0000	
8A YYYY=4005	23	0000	
8A YYYY=0000	1	00000	Assignment of the order of LCR selection (first) for Route Pattern No. assigned by YYYY=4005.
8A YYYY=5000	100	9000	Assignment of Digit Addition Pattern No. 000.
8A YYYY=9000	0	8	Assignment of the digital code to be added for each area code.

Example 2: *When the PBX is a Tandem Office in the network.*



Trunk Route to Office B : 01
Tie Line Access Code : 8
Area Code of Office B : 21
Intra-Office Termination : 838

Programming for Example 2:

COMMAND CODE	1ST DATA	2ND DATA	REMARKS
20 Y=0	8	A126	Assignment of Access Code 8 of LCR Group 0.
8A YYYY=A000	0	4005	Assignment of Area Code Development Pattern No. 5.
8A YYYY=4005	21	0001	Assignment of Route Pattern No. 001 to Area Code 21 of office B.
8A YYYY=4005	838	8000	Assignment of Intra-Office Termination to the office code 838.
8A YYYY=0000	1	00001	Assignment of the order of LCR selection (first) for Route Pattern No. assigned by YYYY=4005.

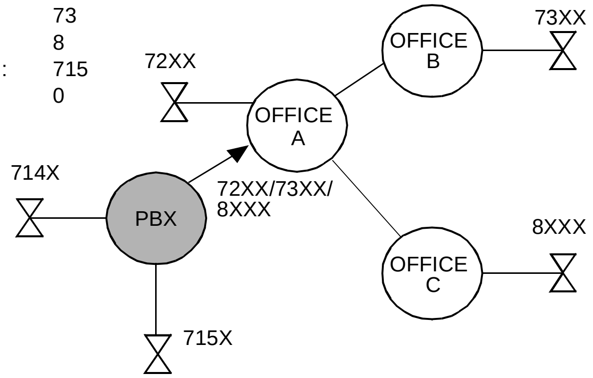
- For Closed Numbering System

START	DESCRIPTION	DATA
CM20	Assign an access code for LCR Group 3.	• Y=0-3 Numbering Group 0-3 (1) X-XXXX: Access Code (2) A129: LCR Group 3
CM8A	Assign an Area Code Development Pattern number to LCR Group 3.	• YYYY=A000 (1) 3: LCR Group 3 (2) 4005-4007: Area Code Development Pattern No. 5-7
	Assign a Route Pattern number to each area code for the Area Code Development Pattern number assigned by CM8A YYYY=A000.	• YYYY=4005-4007 Area Code Development Pattern No. 5-7 (1) NXX/1NXX: Area Code, max. 8 digits (2) 0000-0255: Route Pattern No. 000-255
	Assign an area code (station number) for Intra-Office Terminations, if required.	• YYYY=4005-4007 Area Code Development Pattern No. 5-7 (1) X-XXXXXXXX: Area Code (max. 8 digits) (2) 8001-8008: 1-8 digits Intra-office station
	Specify the order of LCR selection for the Route Pattern number assigned by CM8A YYYY=4005-4007.	• YYYY=0000-0255 Route Pattern No. 000-255 (1) 1-4: Order of LCR Selection 1: 1st 2: 2nd 3: 3rd 4: 4th (2) XXX ZZ XXX: 000-255: LCR Pattern No. ZZ : 00-63: Trunk Route No.
	Assign the digits to be deleted when deleting digits of an area code sent to a distant office. To delete all digits of an area code:	• YYYY=5000-5255 LCR Pattern No. 000-255 (1) 151 : Deletion of all digits of area code (NXX, 1NXX) assigned by CM8A YYYY=4005-4007 (2) 0: To delete
A		

	DESCRIPTION	DATA
A		
CM8A	To delete the designated digits of an area code:	• YYYY=5000-5255 (1) 153 : Designation of digit to be deleted (2) 00 : No digits deleted 01-10 : First digit deleted-first ten digits deleted CCC : No digits deleted
	Assign the digits to be added when adding digits to those sent to a distant office.	• YYYY=5000-5255 (1) 100 : Designation of digit Addition Pattern No. (2) 9000-9255: Digit Addition Pattern No. 000-255 CCC : No digits added
		• YYYY=9000-9255 Digit Addition Pattern No. 000-255 (1) 0 (2) X-X...X : Digits to be added (Max. 32 digits) X =0-9, A (*), B (#), C (Fixed Pause), D (Programmable Pause)
CM35	Assign the digit to be added to the required trunk routes when adding digits to those received from a distant office.	• YY=17 (1) 00-63 : Trunk Route No. (2) 00-09 : Add “0” - Add “9” 10 : Add 2 digits per CM50 YY=00>0
	Assign the data for digit deletion to required trunk routes for deleting the first one or two digits received from a distant office.	• YY=17 (1) 00-63 : Trunk Route No. (2) 11 : Delete first digit 12 : Delete first 2 digits
CM50	If two digit addition is required (CM35 YY=17, 2nd data =10), assign the digits to be added.	• YY=00 (1) 0 (2) XX: Digits to be added
END		

Example 1: *When the PBX is an end office in a network employing a Closed Numbering System.*

Trunk Route to Office A:	00
Area Code of Office A:	72
Area Code of Office B:	73
Area Code of Office C:	8
Area Code of Intra-Office Station:	715
Numbering Plan Group:	0

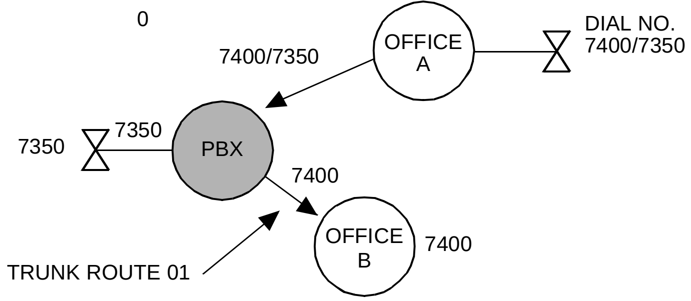


Programming for Example 1:

COMMAND CODE	1ST DATA	2ND DATA	REMARKS
20 Y=0	7	A129	Assignment of Access Code (7, 8) to LCR Group 3.
20 Y=0	8	A129	
8A YYYY=A000	0	4005	Assignment of Area Code Development Pattern No. 5.
8A YYYY=4005	72	0000	Assignment of Route Pattern No. 000 to Area Code (72, 73, 8).
8A YYYY=4005	73	0000	
8A YYYY=4005	8	0000	
8A YYYY=4005	715	8004	Assignment of the 4-digit Intra-Office Station to the Area Code 715.
8A YYYY=0000	1	00000	Assignment of the order of LCR selection (first) for Route Pattern No. assigned by CM8A YYYY=4005.

Example 2: *When the PBX is a Tandem Office in the network.*

Trunk Route to Office B:	01
Area Code of Office B:	740
Area Code of Intra-Office Station:	735
Numbering Plan Group:	0



Programming for Example 2:

COMMAND CODE	1ST DATA	2ND DATA	REMARKS
20 Y=0	7	A129	Assignment of Access Code 7 of LCR Group 3.
8A YYYY=A000	3	4005	Assignment of Area Code Development Pattern No. 5.
8A YYYY=4005	740	0001	Assignment of Route Pattern No. 001 to Area Code 740 of Office B.
8A YYYY=4005	735	8004	Assignment of the 4-digit Intra-Office Station to the Area Code 735.
8A YYYY=0000	1	00001	Assignment of the order of LCR selection (first) for Route Pattern No. assigned by CM8A YYYY=4005.

VARIABLE TIMING PARAMETERS

PROGRAMMING

START	DESCRIPTION	DATA
CM41	Specify the Timing Parameters according to the user's requirements. If no data is set (Displayed "NONE") the standard timing which is initially set is applied.	• Y=0-3 (1) XX: See the Command Manual. (2) XX: See the Command Manual.
END		

VOICE GUIDE

Programming

To provide the message that is sent when a station goes off hook while Message Waiting/Call Forwarding-All Calls/Do Not Disturb service is set to the station:

START	DESCRIPTION	DATA
CM08	Specify the multiple connections of the Digital Announcement Trunk (DAT card) on Announcement Service.	(1) 124 (2) 0 : Available 1◀ : Not available (Single connection)
CM10	Assign a Digital Announcement Trunk card number to the required LEN. **Note:** *The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.*	(1) 000-763: LEN (2) EB002-EB127:Digital Announcement Trunk Card No. For PIM 0/1: EB002-EB031 For PIM 2/3: EB032-EB063 For PIM 4/5: EB064-EB095 For PIM 6/7: EB096-EB127 **Note:** *EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.*
CM12	Assign the Service Restriction Class A for Announcement Service to the required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Announcement Service in the Service Restriction Class A assigned by CM12 YY=02.	• YY=34 Group 0 • YY=35 Group 1 • YY=36 Group 2 • YY=37 Group 3 • YY=38 Group 4 • YY=39 Recording for Announcement Service (Group 0-4) (1) 00-15 :Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ :Allow
CM20	Assign access codes for Announcement Service.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A103: Record (Group 0-4) A104: Replay (Group 0) A105: Replay (Group 1) A106: Replay (Group 2) A107: Replay (Group 3) A108: Replay (Group 4) A109: Delete (Group 0-4)
A		

A

	DESCRIPTION	DATA
CM48	Specify the dial tone, which is sent when a station goes off hook while the service is set for the station, as Special Dial Tone.	• Y=2 (1) 12 : Dial Tone on setting Message Waiting (2) 13 : Dial Tone on setting Call Forwarding-All Calls (3) 14 : Dial Tone on setting Do Not Disturb (4) 0 : Special Dial Tone
CM15	Allow Voice Guide set by CM48 Y=2>12, 13, 14 in the Service Restriction Class A assigned by CM12.	• YYY=116 (1) 00-15 : Service Restriction Class A assigned by CM12 (2) 1◀ : Allow •
CM49	Assign the Voice Guide function for each Digital Announcement Trunk card.	• YY=00 (1) 000-001: Built-in DAT on MP card (2) 002-127: Digital Announcement Trunk Card No. assigned by CM10 (EB002-EB127) (3) 17XX : Voice Guide XX : 00-63: Message No.
	Assign the Message sent when the station goes off hook.	• YY=13 (1) 00 : Message sent when Message Waiting is set (2) 03 : Message sent when Call Forwarding-All Calls/Do Not Disturb is set (3) 00-63 : Message No.

END

Note 1: *While both Message Waiting and Call Forwarding-All Calls/Do Not Disturb Service are set to the station, the message assigned by CM49 YY=13>00 is sent.*

Note 2: *While Message Reminder (from STA/ATT) Service is set to the station, the message assigned by CM49 YY=13>00 is sent.*

Note 3: *While Split Call Forwarding-All Calls Service is set to the station, the message assigned by CM49 YY=13 >03 is sent.*

To provide the Message which is sent when the service feature setting to the station is completed or cancelled:

START	DESCRIPTION	DATA
CM49	Assign the Voice Guide function for each Digital Announcement Trunk card.	• YY=00 (1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk Card No. assigned by CM10 (EB002-EB127) (2) 17XX: Voice Guide XX: 00-63: Message No.
	Assign the Message number when service setting is completed or cancelled to station.	• YY=13 (1) 01: Message sent when service is set 02: Message sent when service is cancelled (2) 00-63: Message No.
CM41	Message Replay Timer for Announcement Service.	• Y=0 (1) 53 (2) 01-99: 4 sec.-396 sec. in 4 sec. increments If no data is set, the default setting is 60-64 sec.
END		

Hardware Required

DAT card or MP card (Built-in DAT)

VOICE MAIL INTEGRATION

Programming

In addition to the programming of CALL FORWARDING-ALL CALLS/BUSY LINE/NO ANSWER, do the following programming.

START	DESCRIPTION	DATA
CM08	Specify whether Ringing Transfer to an Attendant via VMS is available.	(1) 063 (2) 0 : Available 1◀ : Not available
	Specify the sending of the Mail Box number to the VMS when the VMS is recalled after transferring a call to an unanswered station.	(1) 333 (2) 0 : To send 1◀ : Not sent
CM13	Provide Message Waiting service for a station with MW lamp.	• YY=03 (1) X-XXXXXXXX: Station No. (2) 0: To provide
	Provide VMS service for a station port interfaced with the VMS (VMS station).	• YY=10 (1) X-XXXXXXXX: Station No. (2) 0: To provide
	Provide Message Waiting service for a VMS station port.	• YY=13 (1) X-XXXXXXXX: Station No. (2) 0: To provide
CM12	Assign the Service Restriction Class A for Message Waiting to a station with a MW lamp and a VMS station port.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Message Waiting in the Service Restriction Class A assigned by CM12 YY=02.	• YY=24 Station with MW lamp • YY=40 VMS Station (1) 00-15:Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for MW lamp set/reset from a VMS station port.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access code (2) A040: Set A041: Reset
	Assign the access code to retrieve a message from the VMS and search Message Reminder/ Message Waiting.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access code (2) A146: Search A147: Retrieve
A		

	DESCRIPTION	DATA
A		
CM50	Assign the access code to be sent out to a VMS after/before a Mail Box number, if required. **Note 1:** *"C" or "D" should not be assigned as the first digit of an access code, to insert prepause timing. Prepause timing is assigned by CM41 Y=0>44.* **Note 2:** *If "C" is inserted in the access code, it can be used as a pause (1.5 sec.). To provide a programmable pause, insert "D" instead of "C" (Programmable Pause:CM41 Y=0>38).*	• Y Y=00 (1) 3: Access Code to be sent out before a Mail Box No. **Note 1** 4: Access Code to be sent out after a Mail Box No. (2) XX-XXXX: Access code to be sent out to a VMS X: 0-9, A (*), B (#), C/D (Pause) **Note 2** NONE ◀ : Not sent out
CM41	Specify the prepause timing, DTMF signal width, and Inter-digital pause for VMS.	• Y=0 (1) 44: Prepause Timing (2) 00-12, 13: 0-12, 0.5 sec. If no data is set, the default setting is one second.
	Specify the DTMF signal width for VMS.	• Y=0 (1) 48 (2) 01: 64 msec. 02: 128 msec. If no data is set, the default setting is 128 msec.
	Specify the DTMF inter-digital pause for VMS.	• Y=0 (1) 49 (2) 01: 32 msec. 05: 120 msec 02: 64 msec. 06: 160 msec. 03: 80 msec. 07: 200 msec. 04: 100 msec. 08: 240 msec. If no data is set, the default setting is 160 msec.
CM77	Assign VMS display, if required.	• Y=0 By Character Code (1) X-XXXXXXXX: Station No. (2) 564D53: VMS character code • Y=1 By Character (1) X-XXXXXXXX: Station No. (2) VMS (Character)
B		

	DESCRIPTION	DATA
B		
CM51	Assign the VMS station as the destination of a call from a station which is set Message.	• YY=15 (1) 00-63: Tenant No. (2) X-XXXXXXXX: VMS Station No.
CM90	Assign the MW lamp on a D^{term}, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F1005
	To access the VMS from ATTCON/ DESKCON, assign Out Pulse (DTMF signal) -short/long key.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6112:Out Pulse (DTMF signal) - short F6113:Out Pulse (DTMF signal) - long
CM41	When Out Pulse (DTMF signal)-long is designated by CM90, assign the DTMF signal width. **Note:** *When Out Pulse (DTMF signal)-short is designated by CM90, DTMF signal width is set to 128 msec. (Fixed).*	• Y=0 (1) 14: DTMF signal width (2) 01-50: 64-3200 msec. (64 msec. increments) If no data is set, default setting is 512 msec.
CM65	To allow Voice Mail Private Password: Assign Password Privacy for the Tenant number of the VMS ports. **Note:** *This is effective for ports assigned as VMS ports in CM13 YY=10.*	• YY=30 (1) 00-63: Tenant No. of VMS ports (2) 0 : Allow 1◀ : Not allowed
END		

To provide the Message Waiting Indication per line when a D^{term} accommodates multiline:

START	DESCRIPTION	DATA
CM11	Assign a Virtual Line station number to required Virtual LEN.	(1) 000-255: Virtual LEN (2) X-XXXXXXXX: Virtual Line station No.
	The Virtual LEN has no relation with the physical LEN used in CM10. Therefore, any Virtual LEN can be assigned to each Virtual Line station number. However, the Virtual Line station number should be different from Single line number assigned by CM10.	
CM90	Accommodate the Virtual Line to the D^{term}.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) X-XXXXXXXX: Virtual Line station No.
CM08	Provide the system with Message Waiting Indication for sub line.	(1) 140 (2) 0 : MW Indication for My Line and sub line 1◀: MW Indication for My Line only
CM65	Provide Message Waiting Indication for sub line to each tenant.	• YY=34 (1) 00-63:Tenant No. (2) 0 : MW Indication for My Line and sub line 1◀ : MW Indication for My Line only
END		

VOICE MAIL TRANSFER

To transfer a call from an Attendant to a VMS, if Camp-On is set to the transferred destination, and that is not answered by predetermined timing:

START

	DESCRIPTION	DATA
CM08	Provide the system with VMS transfer.	(1) 428: VMS transfer with Camp-On (2) 0: To provide
CM41	Specify the timer of Attendant Recall for Camp-On.	•Y=0 (1) 00: Attendant Recall Timer (2) 01-14 : 2.4-33.6 sec. (2.4 sec. increments) 15-24: 38.4-124.8 sec. (9.6 sec. increments) If no data is set, the default setting is 31.2-33.6 seconds.
CM51	Specify the destination VMS station number when a Camp-On call is not answered. The first data should be the tenant number of the destination station called.	•YY=18 Destination VMS No. assignment (1) 00-63: Tenant No. (2) X-XXXXXXXX: VMS Pilot No.

END

To transfer a call from an Attendant or a station to a VMS by dialing of a Single Digit Feature Access Code “9” or by pushing a function key, while hearing RBT or BT from the destination station:

START	DESCRIPTION	DATA
CM08	Specify whether dialing of the Single Digit Feature Access Code is available or not while hearing RBT.	(1) 156: Single Digit Feature Access Code while hearing RBT (2) 0: Available 1◀ : Not available
	Specify whether dialing of the Single Digit Feature Access Code is available or not while hearing BT.	(1) 208: Single Digit Feature Access Code while hearing BT (2) 0: Available 1◀ : Not available
CM51	Specify the destination VMS station number by transferring with Single Digit Feature Access Code or a function key. The first data should be the tenant number of the destination station called.	•YY=18 Destination VMS No. assignment (1) 00-63: Tenant No. (2) X-XXXXXXXX: VMS Pilot No.
CM90	To the ATTCON/DESKCON or the D$^{\text{term}}$, assign a function key to transfer a call to a VMS while hearing RBT or BT, if required.	•YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6123: Transferring to VMS (1) My Line No. + $\boxed{,}$ + Key No. (2) F5001: Transferring to VMS
END		

To provide a D$^{\text{term}}$ with One Touch keys to send Called Number + DTMF Signal after the called party answered, for VMS operations (such as “VMS Extension number + Mail Box number or Password”), refer to the programming (2), (4) in “STATION SPEED DIALING”.

Hardware Required

For interfacing to a VMS with Analog Dialogic Board:
LC card

For interfacing to a VMS with Digital Dialogic Board:
DLC card

For providing the Single-Line Telephone with a Message Waiting Lamp:
4LCD/8LC card

For providing the D$^{\text{term}}$:
DLC card

WHISPER PAGE

Programming

START

	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A for required stations.	• YY=02 (1) X-XXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Specify the Service Restriction Class A for whispering station and whispered station.	• YYY=111 Whispering station • YYY=112 Whispered station (1) 00-15: Service Restriction Class A assigned by CM12 YY=02 (2) 0: Restricted 1◀: Allowed
CM20	Assign the access code for Whisper Page.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access code (2) A188: Whisper Page
CM90	Provide the D^{term} (whispering side) with a Whisper Page key, if required.	• YY=00 (1) My Line No. + , + Key No. (2) F0A88: Whisper Page
CM08	Specify whether the call termination to My Line is restricted or allowed, while the station user makes a call with a Sub Line or trunk line on the D^{term}.	(1) 268 (2) 0 : Restricted 1 ◀ : Allowed
	Specify Busy/Idle status check method as “Station Base” or “Extension Base”. **Note:** *When CM08>268 and CM08>269 is set to “0”, Whisper Page is available for the extension which is making a call with a secondary extension or trunk line on the D^{term}.*	(1) 269 (2) 0 : Station base 1 ◀ : Extension base
CM48	Specify the dial tone, which is sent to the other party when the whispered station answers the Whisper Page.	• Y=2 (1) 17 (2) 0 : No Tone 1 ◀ : Hold Tone

END

CHAPTER 2

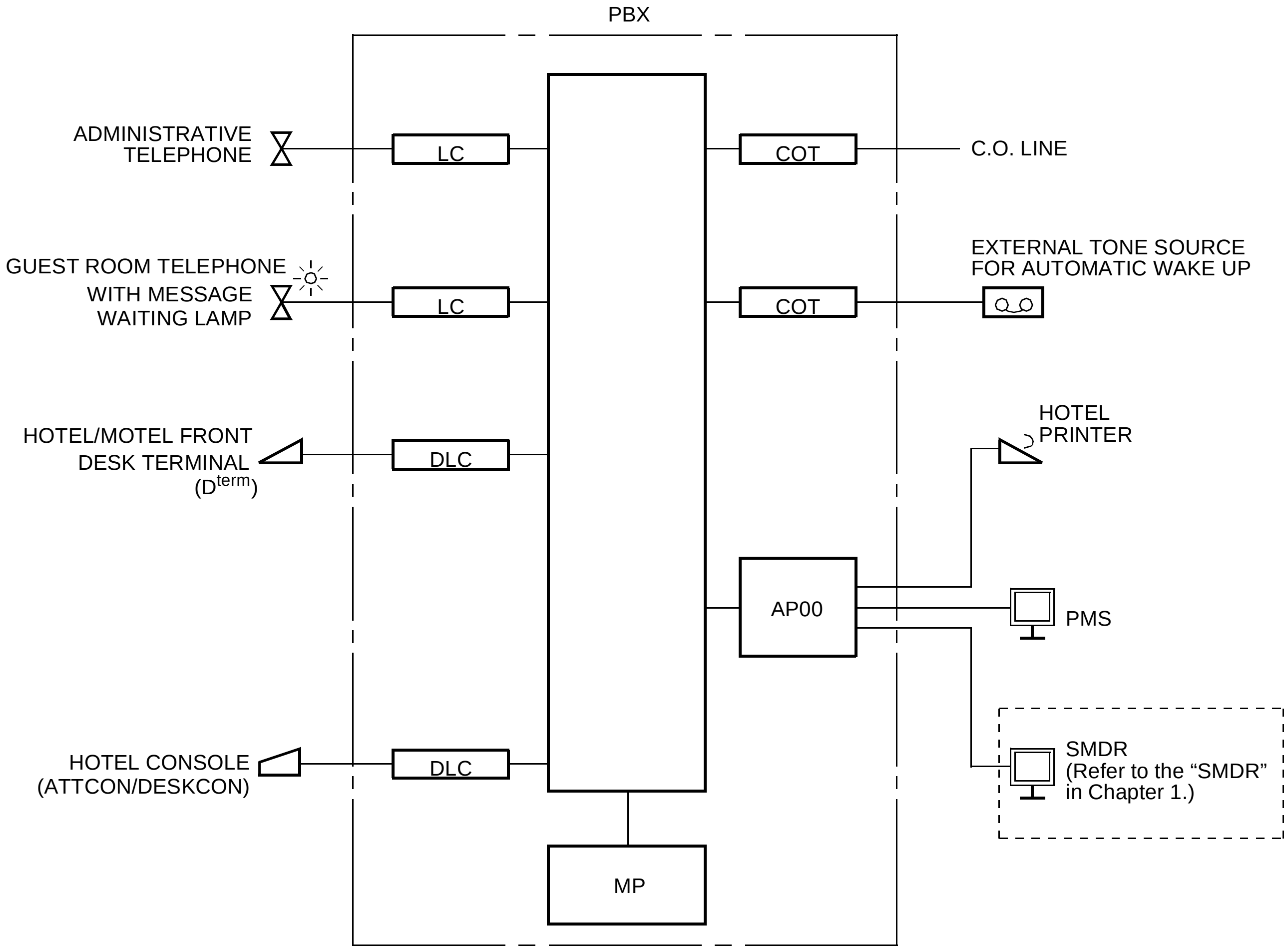
HOTEL FEATURES

This chapter explains the system outline, hardware required, and system data programming for the Hotel System and the Property Management System (PMS).

HOTEL SYSTEM OUTLINE

The figure below shows the system outline of hotel system.

System Outline of Hotel System


PBX
ADMINISTRATIVE TELEPHONE
LC
COT
C.O. LINE
GUEST ROOM TELEPHONE WITH MESSAGE WAITING LAMP
LC
COT
EXTERNAL TONE SOURCE FOR AUTOMATIC WAKE UP
HOTEL/MOTEL FRONT DESK TERMINAL (D^{term})
DLC
HOTEL PRINTER
AP00
PMS
HOTEL CONSOLE (ATTCON/DESKCON)
DLC
SMDR (Refer to the “SMDR” in Chapter 1.)
MP

AP00 : SMDR/Hotel Application Processor Card
COT : C.O. Trunk Card
DLC : Digital Line Circuit Card (for D^{term}/ATTCON)
LC : Line Circuit Card (for Single Line Telephone)
MP : Main Processor Card
PMS : Property Management System
SMDR : Station Message Detail Recording

Application Processor

The Application Processor (AP) manages guest or administration room status and stores call information on each guest or administrative station. The AP also provides interface ports for a Property Management System (PMS), Station Message Detail Recording (SMDR) and a Hotel Printer.

Hotel Console

The ATTCON or DESKCON is programmed as a Hotel Console. The Hotel Console can access Room Cut Off (individual and group), Automatic Wake Up, Message Waiting, or Do Not Disturb (individual and group) with the function keys, in addition to the attendant features and functions.

Hotel/Motel Front Desk Terminal

The D^{term} can be programmed to function as a Hotel/Motel Front Desk Terminal. This allows setting and canceling of the following hotel features:

- Automatic Wake Up
- Check In/Check Out
- Do Not Disturb
- Do Not Disturb - Override
- Message Waiting
- Room Cut Off
- Room Status

Property Management System (PMS)

The PBX provides a data link interface to the customer supplied Property Management System (PMS) accommodating hotel management features. The PMS can be any computer connected to the PBX via a RS-232C interface. It communicates with the PBX using the specified protocols.

The data link interface allows the PMS to accommodate both front- and back-office hotel management features, by providing a means of communication between the PMS and the PBX for features such as Check In/Check Out, Message Waiting, Station Message Detail data, and control functions such as Do Not Disturb and Room Cut Off.

The PMS can communicate with the PBX to obtain the following information:

(1) Maid Status
This information can be entered from either a guest room telephone or Front Desk Terminal, and will automatically be transmitted to the PMS for data update.

(2) Message Waiting Lamp Status Change
This information can be entered from the Attendant Console or Front Desk Terminal. It is then automatically transmitted to the PMS for data update. If the automatic MW lamp off feature is activated, MW data is cleared and status is sent to PMS.

(3) Station Message Detail Data
This information is transmitted to the PMS after completion of each local and toll call.

(4) Wake Up Service
This information can be entered from the Attendant Console, Front Desk Terminal or guest room station, and will be automatically transmitted to the PMS for data update.

(5) Do Not Disturb/Room Cut Off
This information can be entered from the Attendant Console or Front Desk Terminal, and will be transmitted to the PMS by request from the PMS.

(6) Check In/Check Out
This information can be entered from the Attendant Console or Front Desk Terminal, and will be automatically transmitted to the PMS for status update.

(7) Room data image messages indicating requests for data base updates and data base images.

(8) Room change and room swap for data update.

(9) Room occupancy change and room data change for data update.

(10) Routine activity checks between the PMS and the PBX.

The PMS can send the following information to the PBX.

(1) Maid status
(2) MW lamp status changes
(3) Telephone restriction status changes
(4) Check In/Out messages
(5) Room data image inquiry
(6) Wake Up status changes
(7) Room change and room swap
(8) Room occupancy and room data change
(9) Status inquiry for routine activity checks
(10) Guest Name to be displayed on Front Desk Terminal

Station Message Detail Recording (SMDR)

The Station Message Detail Recording (SMDR) sends out the outgoing/incoming C.O. call information to an external SMDR terminal (Personal Computer). The SMDR is usually used in conjunction with the PMS and used for the following purposes:

- Management of guest/administrative station call
  The PMS does not manage the guest/administrative station call.

- Backup of guest/administrative station call for a PMS failure

- Management of either guest or administrative station call
  For example, the SMDR manages an administrative station call, and the PMS manages a guest station call

Hotel Printer

The various system messages and the guest room status can be obtained through a locally provided Hotel Printer. The following information is automatically printed out as a system message:

- Wake Up attempts whether successful or not.
- Remaining messages for the station which is set to Check Out.
- Codes and quantities of the goods requested from a guest room by Direct Data Entry.

If the print out function key is provided on the Front Desk Terminal, the status of the following features are printed out when the feature is set or reset and Room Status print out is activated:

- Automatic Wake Up
- Check In/Check Out
- Do Not Disturb
- Message Waiting
- Room Cut Off
- Room Status - individual guest station/all guest stations

HOTEL SYSTEM CAPACITY

DESCRIPTION	CAPACITY
Guest/Administrative Station	512
Front Desk Terminal	8
Hotel Console	8
Hotel Printer	2
I/O port for PMS/SMDR/Hotel Printer	2

HOTEL SYSTEM SPECIFICATIONS

- PMS Interface
  - Physical Interface: RS-232C
  - Synchronization: Asynchronous
  - Protocol: IMS Procedure
  - Transmission Speed: 1200/2400/4800/9600* bps
  - I/O port: No. 0-3 port of AP00-B card

- SMDR Interface
  - Physical Interface: RS-232C
  - Synchronization: Asynchronous
  - Transmission Speed: 1200/2400/4800/9600* bps
  - I/O port No. 0-3 port of AP00-B card

- Hotel Printer Interface
  - Physical Interface: RS-232C
  - Synchronization: Asynchronous
  - Transmission Speed: 1200/2400/4800 bps
  - I/O port: No. 1/3 port of AP00-B card

*: For the Port 1 and Port 3, data speed cannot be set to 9600 bps.

HOTEL FEATURE LIST

Hotel Feature List

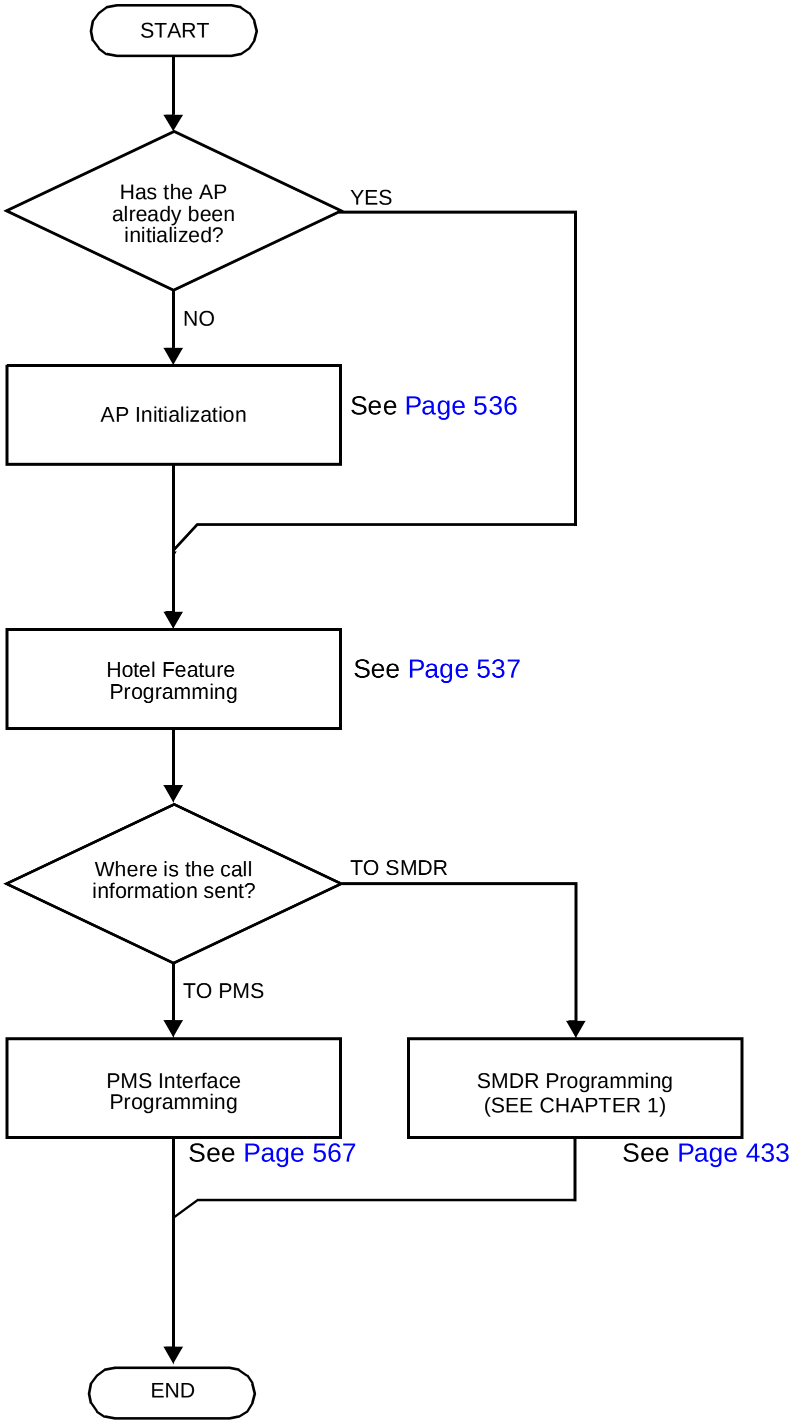
× : Applicable
– : Not applicable

FEATURE NAME	APPLICATION				
	GUEST	ADMINISTRATIVE	FRONT DESK TERMINAL	HOTEL CONSOLE	PMS
Automatic Wake Up	×	×	×	×	×
Check In/Check Out **Note**	–	–	×	–	×
Direct Data Entry	×	–	–	–	×
Do Not Disturb	×	×	×	×	×
Do Not Disturb-System **Note**	–	–	×	×	–
Hotel/Motel Attendant Console	–	–	–	×	–
Hotel/Motel Front Desk Instrument	–	–	×	–	–
House Phone	×	×	×	×	–
Maid Status	×	×	×	–	×
Message Registration	–	–	×	–	×
Message Waiting **Note**	–	×	×	×	×
PMS Interface	–	–	–	–	–
Room Cut Off **Note**	–	–	×	×	×
Room Status **Note**	–	–	×	×	–
Single Digit Dialing	×	×	×	×	–

Note: *Front Desk Terminal, Hotel Console or administrative station can set/cancel this feature to a guest station.*

HOTEL SYSTEM PROGRAMMING SUMMARY

Programming Summary for Hotel System


START
Has the AP already been initialized?
YES
NO
AP Initialization
See Page 536
Hotel Feature Programming
See Page 537
Where is the call information sent?
TO SMDR
TO PMS
PMS Interface Programming
See Page 567
SMDR Programming (SEE CHAPTER 1)
See Page 433
END

HOTEL SYSTEM PROGRAMMING

Precaution

Before programming the system data for the Hotel feature, confirm that the system is under the following status.

- The system is under On-Line mode. (“RUN” lamp is flashing on the MP card.)
- The AP00 card is mounted in the correct location. (for SMDR with AP00, PMS, or Hotel Printer)
- All the system data pertaining to the station, trunks, and service features have already been programmed.

Station Number Data Loading

The AP00 stores the station number data loaded from the MP. When station numbers have been added, deleted or changed by CM10, the station number data must be reloaded to the AP00 by the following procedure.

(1) Flip the MB switch of the AP00 to UP position.

(2) Return the MB switch to DOWN position.

(3) The “**** AP00 START ****” message is printed if a printer provided.

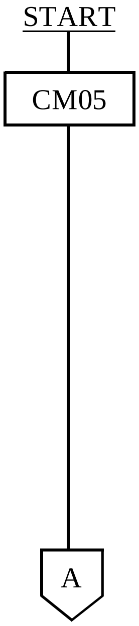
(4) The “SORT COMPLETE” message is printed when the station number has been sent to the AP00.

AP Initialization

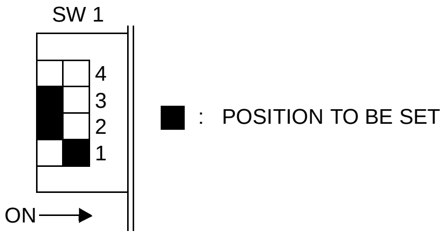
This section explains the data assignment to make the AP active.

You can skip the data assignment explained on this section, if one of the following AP related feature has been activated; SMDR (Station Message Detail Recording), MCI (Message Center Interface), PMS (Property Management System), or Hotel Printer. You can distinguish whether the AP is active or not by the RUN lamp indication. The RUN lamp flashes on green color when the AP is in active.

When you install the AP00 for the first time, you should assign the data shown below.



	DESCRIPTION	DATA
CM05	Assign an AP number to the AP00 card. The AP number must match the SENSE switch setting on the AP00 card. **INITIAL**	Y=0 • 04-15, 20-31: AP No. (1) 04: AP00 card (2)
	On the AP00 card, set SW1 switch as shown below.	SW1-4 should be set as follows; ON : The AP No. is 04-15 OFF : The AP No. is 20-31



Hotel Feature Programming

- See Automatic Wake Up on Page 538
- See Check In/Check Out on Page 544
- See Direct Data Entry on Page 546
- See Do Not Disturb on Page 548
- See Do Not Disturb-System on Page 551
- See Hotel/Motel Attendant Console on Page 553
- See Hotel/Motel Front Desk Instrument on Page 554
- See House Phone on Page 558
- See Maid Status on Page 559
- See Message Restriction on Page 561
- See Message Waiting on Page 564
- See PMS Interface on Page 567
- See Room Cut Off on Page 570
- See Room Status on Page 572
- See Single Digit Dialing on Page 573

AUTOMATIC WAKE UP

Programming

To provide Automatic Wake Up from a guest station or administrative station, or Front Desk Terminal, or PMS:

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A to required guest or administrative station.	• YY=02 (1) X-XXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Automatic Wake Up in the Service Restriction Class A assigned by CM12 YY=02.	• YY=13 Guest station • YY=20 Administrative station allowing single Wake Up Time operation • YY=21 Administrative station allowing multiple Wake Up Time operation (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
	Allow Digital Announcement Trunk access (Record/Replay/Delete) in the Service Restriction Class A assigned by CM12 YY=02, if required.	• YY=33 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
A		

A

	DESCRIPTION	DATA
CM20	Assign the access code for Wake Up call set or reset. **Note:** *This data assignment is not required when Wake Up is set by PMS.*	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A024: Wake Up set from guest A025: Wake Up cancel from guest A027: Wake Up set from administrative station with Single Wake Up Time operation **Note** A028: Wake Up set from administrative station with Multiple Wake Up Time operation **Note**
	When providing the DAT as the internal announcement source, assign the access code to record, replay, and delete a message, respectively.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A100: Record A101: Replay A102: Delete
CM48	Designate the type of tone source for Wake Up call. **Note:** *When the second data is set to "External Tone Source", system reset is required.*	• Y=1 (1) 00: Tone Source of Wake Up Call (2) XX 00 XX: 00: No Tone 02: External Tone Source 05: Digital Announcement Trunk 14: Hold Tone Source on MP card 15: Internal Tone Generator
CM10	When an External Announcement Machine is required, assign the COT card and DK card to required LEN. **Note:** *The DK card number must be assigned to the first LEN (level 0) and the third LEN (Level 2).*	(1) 000-763: LEN (2) DB00-DB09: Interface card No. for External Announcement Machine E800-E831 : DK Card For PIM 0/1 : E800-E807 For PIM 2/3 : E808-E815 For PIM 4/5 : E816-E823 For PIM 6/7 : E824-E831 **Note:** *Circuit No. 3 of E831 is used for built-in External Equipment Interface of MP card by setting CM44.*

B

	DESCRIPTION	DATA
B		
CM10	When the DAT is required, assign the DAT to the required LEN. To provide the restriction announcement for Wake Up call setting, assign the following DAT respectively. • DAT for Wake Up message • DAT for restriction announcement **Note:** *The DAT card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.*	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM 0/1: EB002-EB031 For PIM 2/3: EB032-EB063 For PIM 4/5: EB064-EB095 For PIM 6/7: EB096-EB127 **Note:** *EB000 and EB001 are dedicated to built-in DAT of MP card.*
CM44	When an External Announcement Machine is required, assign the function for Wake Up to the DK card or MP built-in DK.	(1) XX Y XX: 00-31: DK Card No. assigned by CM10 (E800-E831) Y: 0-3: Circuit No. 313: MP built-in External Equipment Interface (2) 0100: External Announcement Machine for Wake Up Call
CM08	Specify the sending Wake Up message to Hotel Printer and PMS, when setting Wake Up feature from guest station.	(1) 200 (2) 0: Available
	Specify the timing for Wake Up call start.	(1) 228: Wake Up Call Start Timing (2) 0 : At preset time 1◀: 5 minutes prior to preset time
C		

	DESCRIPTION	DATA
C		
CM08	Specify the condition for printing the Wake Up call information if Hotel Printer is provided.	(1) 282: “RING ON OK” when call starts 283: “STATION BUSY” when station is busy 284: “CONNECTION BLOCK” when call is unsuccessful 286: “STATION ANSWER” when station answers 287: “STATION NO ANSWER” when station does not answer (2) 0 : Not printed 1◀: Printed
	Specify whether Automatic Wake Up record is printed out on Hotel Printer, and the report is sent to PMS when setting or resetting Automatic Wake Up.	(1) 267 (2) 0 : Available 1◀: Not available
CM90	Assign the function keys for Automatic Wake Up to the D^{term} of guest room station or administrative station, if provided. **Note:** *This data assignment is not required when Wake Up is set by PMS.*	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0024: Automatic Wake Up set/reset from guest station F0027: Automatic Wake Up set/reset from administrative station with Single Wake Up Time operation. **Note** F0028: Automatic Wake Up set/reset from administrative station with Multiple Wake Up Time operation. **Note**
	Assign the function keys for Automatic Wake Up to the Front Desk Terminal. **Note:** *This data assignment is not required when Wake Up is set by PMS.*	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F1067: Automatic Wake Up **Note** F1074: Set F1075: Reset F1077: Release
D		

	DESCRIPTION	DATA
D		
CM49	When providing DAT, assign the answering message for Wake Up to the DAT card or MP built-in DAT.	• YY=00 (1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk Card No. assigned by CM10 (2) 0C XX: Answering message on Automatic Wake Up XX: 00-63: Message No. • YY=08 (1) 00-63: Tenant No. (2) 00-63: Message No. assigned by CM49 YY=00
CM41	Specify the duration of Wake Up call.	• Y=0 (1) 23 (2) 01-08: 0 sec.-32 sec. (4 sec. increments) If no data is set, the default setting is 28-32 sec.
	When providing the DAT, specify the duration of message replay timer for Automatic Wake Up.	• Y=0 (1) 52 (2) 01-99: 0 sec.-396 sec. (4 sec. increments) If no data is set, the default setting is 60-64 sec.
CM42	Specify the number of Wake Up call attempts before abandonment.	(1) 03 (2) 01-05: Number of attempted Wake Up calls If no data is set, the default setting is 05.
	Specify the maximum number of Wake Up calls can be set at the same time.	(1) 04 (2) 01-32: Max. number of stations If no data is set, the default setting is 10.
CM08	Specify the action when the number of Wake Up calls exceeds the maximum number assigned by CM42>04. **[Series 2300 (R4.1) software required]**	(1) 806 (2) 0 : Restrict Wake Up call setting 1◀: Set to 5 or 10 minutes prior to preset time
E		

E	DESCRIPTION	DATA
CM49	Assign the restriction announcement for Wake Up call to the DAT card or MP built-in DAT. **[Series 2300 (R4.1) software required]**	• YY=00 (1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk No. (EB002-EB127) assigned by CM10 (2) 1900: Restriction Announcement for Wake Up call
CMD000	Send Wake Up message to PMS when setting Wake Up feature, if PMS provided.	(1) 134 (2) 1: To send
	Specify the sending of result of Wake Up message when performing Wake Up feature.	(1) 135 (2) 1: To send
CMD015	Assign the Service Class number for CMD016 to required stations, if PMS provided.	(1) X-XXXX: Guest/Administrative station No. (2) 00◀-15: Service Class No.
CMD016	Send Room Status Code which includes Wake Up record, to PMS, if PMS provided.	(1) XX 05: Room Status Code sending to PMS XX: Service Class No. assigned by CMD015 (2) 1: To send
END		

Hardware Required

To provide Hotel Printer or Front Desk Terminal or PMS:
AP00-B card
Printer (Customer provided) and RS PRT-15S CA/RS NORM-4S CA
Front Desk Terminal
PMS and RS RVS-15S CA/RS RVS-4S CA/RS NORM-4S CA

To provide the external announcement machine:
COT card
DK card or MP card (built-in DK)
Announcement Machine (Customer provided)

To provide the internal digital announcement source:
DAT card or MP card (built-in DAT)

CHECK IN/CHECK OUT

Programming

To provide Check In/Check Out from a Front Desk Terminal or PMS:

START	DESCRIPTION	DATA
CMD000	Provide the print out function of Check In time when the Check In is set from Front Desk Terminal.	(1) 11 (2) 1: Available
CMD015	Assign the Service Class number to guest stations.	(1) X-XXXX : Guest Room station No. (2) 00◀-15 : Service Class No.
CMD016	Allow Room Status operation set from Front Desk Terminal.	(1) XX 06 XX: 00-15: Service Class No. assigned by CMD015 (2) 1: Yes
CMD000	Send Check Out Complete message to PMS when PBX receives Check Out message from PMS.	(1) 87 (2) 1: To send
	Send the message to PMS if a checked out station is originating a C.O. call.	(1) 88 (2) 1: To send
CMD001	Assign a Room Status Code set by Check In operation.	(1) 12 (2) 1-8: Room Status Code
	Assign a Room Status Code set by Check Out operation.	(1) 13 (2) 1-8: Room Status Code
A		

A

	DESCRIPTION	**DATA**
CMD031	Assign the required functions to the Room Status codes set by Check In and Check Out operations.	(1) X00 : Room Cut Off is set X01 : Room Cut Off is cancelled X02 : Do Not Disturb is set X03 : Do Not Disturb is cancelled X04 : Wake Up call is cancelled X05 : Message Waiting Lamp is turned off X06 : Check In time is set X07 : Check In time is cleared (2) (X : Room Status Code) 0◀ : No 1 : Yes

END

Hardware Required

AP00-B card
Front Desk Terminal or
PMS and RS RVS-15S CA/RS RVS-4S CA/RS NORM-4S CA

DIRECT DATA ENTRY

Programming

START	DESCRIPTION	DATA
CMD015	Assign the Service Class number to guest room station.	(1) X-XXXX : Guest station No. (2) 00◀-15 : Service Class No.
CMD016	Allow Direct Data Entry feature to the Service Class assigned by CMD015.	(1) XX 24 XX: 00-15: Service Class No. assigned by CMD015 (2) 1: Available
CM20	Assign the access code for Direct Data Entry.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A097
CM90	Provide the guest room station with the function key for Direct Data Entry, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0097: Direct Data Entry
A		

	DESCRIPTION	DATA
A		
CMD001	Designate the output unit for Direct Data Entry.	(1) 252 (2) 0◀: PMS 1 : Hotel Printer 2 : PMS and Hotel Printer
	Designate the printout format of Direct Data Entry.	(1) 253 (2) 0◀: Printout Format 1 1 : Printout Format 2 (See the examples below)
END		

Printout format 1 (2nd data: 0)

```
1999    11/01    17:20                    MON
NO.          220
CODE 1                                    1
CODE 2                                    2
CODE 3                                    2
CODE 4                                    1
```

Printout format 2 (2nd data: 1)

```
1999    11/01    17:20                    MON
NO.          220
CODE                                      1
QUANTITY                                  2
CODE                                      2
QUANTITY                                  1
```

Hardware Required

AP00-B card

Printer (Customer provided) and RS PRT-15S CA/RS NORM-4S CA

PMS and RS RVS-15S CA/RS RVS-4S CA/RS NORM-4S CA

DO NOT DISTURB

Programming

To provide Do Not Disturb from a guest station or administrative station, or Front Desk Terminal, or Hotel Console, or PMS:

START	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class A to required stations.	• YY=02 (1) X-XXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Do Not Disturb in the Service Restriction Class A assigned by CM12 YY=02.	• YY=19 (1) 00-15 : Service Restriction Class A assigned by CM12 YY=02 (2) 1◀ : Allow
CM20	Assign the access code for Do Not Disturb Set/ Cancel.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A022: Set A023: Cancel
CM51	Assign the destination of a call transferred when the called station is in Do Not Disturb.	• YY=10 (1) 00-63: Tenant No. (2) X-XXXX: Station No. or E000: Attendant Console
CM90	Assign the Call Forwarding-Intercept (ICPT) key, if ATTCON/DESKCON is assigned as destination by CM51 YY=10.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6065: Call Forwarding-Intercept
	Assign the DND function key to the D^{term}, if required.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F0022: Do Not Disturb set/reset
A		

A

	DESCRIPTION	DATA
CM90	Assign the DND function keys to the Front Desk Terminal, if provided.	• YY=00 (1) My Line No. + , + Key No. (2) F1064: Do Not Disturb F1074: Set F1075: Reset F1077: Release F1080: Do Not Disturb Override
	Assign the DND function keys to the Hotel Console, if provided.	• YY=00 (1) ATTCON No. (E000-E007) + , + Key No. (2) F6102: Do Not Disturb F6103: Do Not Disturb Override F6104: Reset
CM08	Specify the sending Do Not Disturb message to Hotel Printer and PMS when setting Do Not Disturb from guest station.	(1) 201 (2) 0: Available
	Specify Call Forwarding-Busy Line/Station Hunting for a station set to Do Not Disturb.	(1) 240 (2) 0 : Available 1◀: Not available
	For a system with multiple-tenant, specify the destination of a call transferred in CM51, YY=10 for the tenant of calling or called station.	(1) 241 (2) 0 : Tenant of called station 1◀: Tenant of calling station
	Specify whether Do Not Disturb record is printed out on Hotel Printer, and the report is sent to PMS when setting or resetting Do Not Disturb.	(1) 267 (2) 0 : Available 1◀: Not available
CM48	Select the Dial Tone on setting Do Not Disturb.	• Y=2 (1) 14: Dial Tone on setting Do Not Disturb (2) 0 : Special Tone 1◀: Dial Tone

B

B

	DESCRIPTION	DATA
CMD000	Send Controlled Restriction message to PMS when setting Do Not Disturb, if PMS provided.	(1) 114 (2) 1: To send
CMD015	Assign the Service Class number for CMD016 to required stations, if PMS provided.	(1) X-XXXX: Station No. (2) 0◀-15: Service Class No.
CMD016	Send Room Status Code which includes Do Not Disturb record, to PMS, if PMS provided.	(1) XX 05: Room Status Code sending to PMS XX : Service Class No. assigned by CMD015. (2) 1: To send

END

Hardware Required

To provide Front Desk Terminal or PMS:
AP00-B card
Front Desk Terminal or
PMS and RS RVS-15S CA/RS RVS-4S CA/RS NORM-4S CA

DO NOT DISTURB-SYSTEM

Programming

To provide Do Not Disturb-System from a Front Desk Terminal or Hotel Console:

START	DESCRIPTION	DATA
CM13	Assign Do Not Disturb-System to required stations. Do Not Disturb is set to the stations assigned by this command simultaneously from the Front Desk Terminal or Attendant Console.	• YY=00 (1) X-XXXX: Station No. (2) 0: To provide
CM51	Assign the destination of a call transferred when the called station is in Do Not Disturb mode.	• YY=10 (1) 00-63: Tenant No. (2) X-XXXX: Station No. or E000: Attendant Console
CM90	Assign the Call Forwarding-Intercept (ICPT) key, if the ATTCON/DESKCON is assigned as destination by CM51 YY=10.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6065: Call Forwarding-Intercept
	Assign the DND function keys to the Front Desk Terminal, if provided.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F1064: Do Not Disturb F1072: Group F1074: Set F1075: Reset F1077: Release F1080: Do Not Disturb Override
	Assign the DND function keys to the Hotel Console, if provided.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6102: Do Not Disturb F6103: Do Not Disturb Override F6104: Reset
A		

	DESCRIPTION	DATA
A		
CM08	Specify Call Forwarding-Busy Line/Station Hunting for a station set to Do Not Disturb-System.	(1) 240 (2) 0 : Available 1◀: Not available
	For a system with multiple tenant, specify the destination of a call transferred in CM51 YY=10 for the tenant of calling or called station.	(1) 241 (2) 0 : Tenant of called station 1◀: Tenant of calling station
	Specify whether Do Not Disturb record is printed out on Hotel Printer, and the report is sent to PMS when setting or resetting Do Not Disturb.	(1) 267 (2) 0 : Available 1◀: Not available
CM48	Select the Dial Tone on setting Do Not Disturb.	• Y=2 (1) 14: Dial Tone on setting Do Not Disturb (2) 0 : Special Tone 1◀: Dial Tone
END		

HOTEL/MOTEL ATTENDANT CONSOLE

Programming

In addition to programming the ATTCON or DESKCON as described in CHAPTER 1, assign the Hotel function keys to the Console.
For ATTCON, refer to SN610 ATTCON on Page 30.
For DESKCON, refer to SN716 DESKCON on Page 32.
For Multi-function key, refer to MULTI-FUNCTION KEY on Page 51.

START	DESCRIPTION	DATA
CM90	For ATTCON/DESKCON, assign the required hotel function keys.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6100: Room Cut Off F6101: Message Waiting F6102: Do Not Disturb F6103: Automatic Wake Up/Do Not Disturb Override F6104: Reset F6108: Do Not Disturb Override F6109: Wake Up
END		

HOTEL/MOTEL FRONT DESK INSTRUMENT

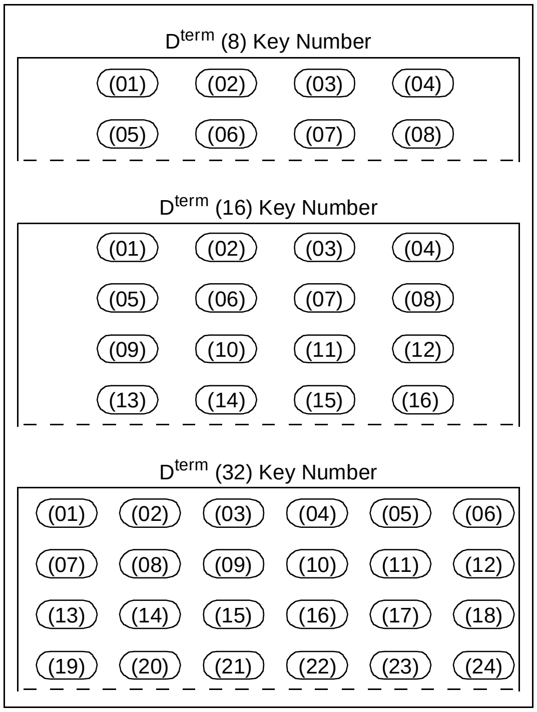
Programming

START

	DESCRIPTION	DATA
CM02	Assign the system clock data.	(1) 0: Calendar Year (2) 1900-2099 (1) 1: Date (2) MM DD WW MM : 01-12 (Month) DD : 01-31 (Date) WW : 00 (Sunday) : 01 (Monday) : 02 (Tuesday) : 03 (Wednesday) : 04 (Thursday) : 05 (Friday) : 06 (Saturday) (1) 2: Time (2) HH MM SS HH : 00-23 (Hour) MM : 00-59 (Minute) SS : 00-59 (Second)
CM10	Assign a My Line number for Front Desk Terminal. **Note:** *The number of Front Desk Terminals is limited to 8 units per system.*	(1) 000-763: LEN (2) FX-FXXXX: My Line No.
CM12	Assign the Service Restriction Class B for Front Desk Terminal to required D^{term}.	• YY=02 (1) X-XXXX: My Line No. (2) XX ZZ ZZ: 00-15◀: Service Restriction Class B
CM15	Allow Front Desk Terminal in the Service Restriction Class B assigned by CM12 YY=02.	• YY=62 (1) 00-15◀ : Service Restriction Class B assigned by CM12 YY=02 (2) 1◀ : Allow

A

A

	DESCRIPTION	DATA
CM90	Assign the Hotel function keys on the Front Desk Terminal.  D^{term} (8) Key Number (01) (02) (03) (04) (05) (06) (07) (08) D^{term} (16) Key Number (01) (02) (03) (04) (05) (06) (07) (08) (09) (10) (11) (12) (13) (14) (15) (16) D^{term} (32) Key Number (01) (02) (03) (04) (05) (06) (07) (08) (09) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24)	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F1064: Do Not Disturb F1065: Room Cut Off F1066: Message Waiting F1067: Automatic Wake Up F1068: Check In F1069: Room Status F1071: Print Out F1072: Group F1074: Set F1075: Reset F1076: Cancel F1077: Release F1080: Do Not Disturb Override
CMD001	Specify the symbol of the currency printed out.	(1) 256 (2) 0◀: $ 1 :Not printed (△ will be printed) 2 : FF (French)
CMD000	Designate the language of message printed out.	(1) 2: Language of message printed out (2) 1◀: Other than Japanese
	Specify the Printer Line Feed Code.	(1) 103 (2) 0◀: CR 1 : CR and LF

B

B

DESCRIPTION	DATA
CMD001 Assign the attribute data, depending on the port (Port 1/3) connected to the printer. **AP00 INITIAL**	(1) See the following table. (2) See the following table.

1ST DATA (1)				MEANING	2ND DATA (2)	MEANING
PORT 0	PORT 1	PORT 2	PORT 3			
	24		32	Data speed	2/3/4	1200/2400/4800 bps
	25		33	Stop bit length	2	2 bits
	26		34	Data length	0	7 bits
	27		35	Parity	1	Even Parity
	100		140	Function	16/17	Hotel Printer 0/ Hotel Printer 1
	101		141	Priority for data processing	1	2nd
	102		142	Number of characters per line to be printed out	2	80 characters
	103		143	Number of lines per page	0-88	0: No page 1: ≀ 88: No. of lines including space within a page (Depends on size of printer paper used)
	104		144	Number of lines per page to be printed out	0-88	0: No page 1: ≀ 88: No. of lines to be printed out within a page

C

	DESCRIPTION	DATA
C		
CMD035	Assign the Hotel Printer to each Front Desk Terminal.	(1) X-XXXX: My Line No. of Front Desk Terminal (2) 0◀: Hotel Printer 0 1 : Hotel Printer 1
	By system reset (press SW1 on the MP card), station number information is transferred from the MP to the AP. When the transfer is completed, message “SORT COMPLETE” is printed out on the Hotel printer. “SORT COMPLETE” printout takes about 4 minutes.	
END		

Hardware Required

AP00-B card
Front Desk Terminal
Printer and RS PRT-15S CA/RS NORM-4S CA

HOUSE PHONE

Programming

START	DESCRIPTION	DATA
CM12	Assign the House Phone Group number to required stations. **Note:** *There is no limit to the number of House Phones permitted in the system as long as the maximum number of ports is not exceeded.*	• YY=03 (1) X-XXXX: Station No. (2) 00-03: House Phone Group 0-3
CM51	Assign the destination of each House Phone Group.	• YY=14 (1) 00-03: House Phone Group 0-3 (2) X-XXXX : Station No. of the destination E000 : Attendant Console
CM08	Specify the result of Switch Hook Flash on stations within a House Phone Group. To allow stations within a House Phone Group to transfer a call or access a feature, set the data to “0”.	(1) 055: For House Phone Group 0, 1 056: For House Phone Group 2, 3 (2) 0 : Special Dial Tone 1◀: Attendant Recall
END		

MAID STATUS

Programming

In addition to the programming of HOTEL/MOTEL FRONT DESK INSTRUMENT (see Page 554) or PMS INTERFACE (see Page 567), do the following programming:

START	DESCRIPTION	DATA
CM08	If maid ID Code is used, set the data for 281 to 0.	(1) 281 (2) 0 : Available 1 ◀: Not available
CM20	Assign the access code for Maid Status.	• Y=0-3 Numbering Plan Group 0-3 (1) X-XXXX: Access Code (2) A029
CMD000	Send Maid Status message to PMS when setting Maid Status by guest room telephones or Front Desk Terminal.	(1) 119 (2) 0◀: To send
CMD015	Assign the Service Class number to required stations.	(1) X-XXXX: Station No. (2) 0◀-15: Service Class No.
CMD016	Send Room Status Code which includes Maid Status record, to PMS, if PMS provided.	(1) XX 05: Room Status Code sending to PMS XX : Service Class No. assigned by CMD015. (2) 1: To send
	Allow Room Status operation set from Front Desk Terminal to guest stations.	(1) XX 06 XX: Service Class No. assigned by CMD015 (2) 1: Yes
A		

A

DESCRIPTION	DATA

CMD031

Define the functions of each Room Status Code.
For example, to provide the following Room Status Code, set the functions to each Room Status Code according to the table below.

Room Status Code	Room Status
1	: Check In **Note**
2	: Check Out **Note**
3	: Under Cleaning
4	: Cleaning Finished
5	: Check Finished
6	: Out of Service
7	: —
8	: —

Note: *The Room Status Code for Check In and Check Out are to be assigned by CMD001>12 and CMD001>13.*

ROOM STATUS CODE	FUNCTION No.									
	00	01	02	03	04	05	06	07	08	31
1		1		1	1	1	1			
2	1			1	1			1		
3	1		1					1		1
4	1		1			1		1		1
5		1		1		1		1		1
6	1				1	1		1		1
7										
8										

(1) X YY
X : 1-8: Room Status Code
YY : Functions
00 : Room Cut Off Set
01 : Room Cut Off Reset
02 : Do Not Disturb Set
03 : Do Not Disturb Reset
04 : Wake Up Call Reset
05 : Message Waiting Reset
06 : Check In Time Registration
07 : Check In Time Clear
31 : Dialing from Guest Room is allowed
(2) 0◀ : No
1 : Yes

CM90

Assign the Room Status key to the Front Desk Terminal.

- YY=00

(1) My Line No. + , + Key No.
(2) F1069: Room Status

END

Hardware Required

AP00-B card
Front Desk Terminal or
PMS and RS RVS-15S CA/RS RVS-4S CA/RS NORM-4S CA

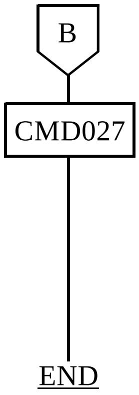
MESSAGE REGISTRATION

Programming

The SMDR is used to provide Message Registration information to a call accounting system.
Refer to Station Message Detail Recording (SMDR) on Page 433.
To provide Message Registration on PMS:

START	DESCRIPTION	DATA
CM08	Provide the system with SMDR service for tandem calls.	(1) 040 (2) 0: Available
	Assign the Pseudo-Answer signal function when the answer signal (Battery Reversal) has not been detected within the time assigned by CM41 Y=0>03 after making an outgoing trunk call. **Note:** *This data is effective when CM35 Y=04 is set to "1".*	For Australia (1) 123 (2) 0 : To send 1◀: Not sent For other than Australia (1) 123 (2) 0 : Not sent 1◀: To send
CM13	Provide SMDR service for outgoing calls to required stations.	• Y=06 (1) X-XXXX: Station No. (2) 1◀: To provide
	Provide SMDR service for incoming calls to required stations.	• YY=05 (1) X-XXXX: Station No. (2) 0 : To provide 1◀: Not provided
CM35	Specify the type of answer signal from distant office in outgoing connection for each trunk route.	• YY=04 (1) 00-63: Trunk Route No. (2) 2 : Answer signal arrives from Tie Line/ISDN 7◀: Answer signal does not arrive
	Provide SMDR service for outgoing calls to required trunk routes.	• YY=14 (1) 00-63: Trunk Route No. (2) 1◀: To provide
A		

	DESCRIPTION	DATA
A		
CM35	Assign a Trunk Access Code for SMDR.	• YY=44 (1) 00-63: Trunk Route No. (2) 00-99: Trunk Access Code
	Provide SMDR service for incoming calls to required trunk routes.	• YY=49 (1) 00-63: Trunk Route No. (2) 0: To provide
CM41	Specify the timing of SMDR valid call timer (pseudo-answer timer).	• Y=0 (1) 03 (2) 01-08: 4 sec. - 40 sec. (4-sec. increments) If no data is set, the default setting is 20-24 seconds.
CMD000	Specify SMDR service for incoming calls with Account Code entry.	(1) 70 (2) 0 : Effective for incoming calls with Account Codes only 1◀: Effective for all incoming calls
	Send message to PMS, if a checked out station is originating a C.O. call.	(1) 88 (2) 0◀: Not sent 1 : To send
	Send information of tandem calls to SMDR.	(1) 77 (2) 1: To send
CMD015	Assign the charging Service Class number to each station number.	(1) X-XXXX : Station No. (2) 00◀-15 : Service Class No.
CMD016	Send detail call information on outgoing calls to SMDR.	(1) XX 17 XX: Service Class No. assigned by CMD015 (2) 1: To send
	Send C.O./Tie Line incoming calls to SMDR.	(1) XX 30 XX: Service Class No. assigned by CMD015 (2) 1: To send
CMD026	Assign the Development Table number to outgoing trunk routes.	(1) 00-63 : Trunk Route No. (2) 000◀-511 : Development Table No.
B		



DESCRIPTION	DATA
Specify the charging method to each dialed number. **Note:** *The second data should be "9" if SMDR is provided.*	(1) XXX Y XXX: 000-511: Call Development Table No. assigned by CMD026 Y: Dialed Digit 0-9, A (*), B (#) (2) 1 : No charge 9◀: Send to SMDR

Hardware Required

AP00-B card
RS RVS-15S CA/RS RVS-4S CA/RS NORM-4S CA
Call Accounting System (customer provided) or PMS

Note: *The call accounting system must be locally provided and compatible with the SMDR interface.*

MESSAGE WAITING

Programming

To provide the Message Waiting from an administrative station, Front Desk Terminal, Hotel Console, or PMS:

START

DESCRIPTION / **DATA**

CM12

Assign the Service Restriction Class A for Message Waiting to required guest or administrative station as shown below.

- YY=02

(1) X-XXXX : Station No.
(2) XX ZZ
XX: 00-15◀: Service Restriction Class A

CM15

Allow Message Waiting in the Service Restriction Class A assigned by CM12 YY=02.

GUEST/ADMINISTRATIVE	CM15 YY=24	CM15 YY=40
Guest station w/o MW Lamp	0	0
Guest station with MW Lamp	0	1
Administrative station	1	0

- YY=24 Administrative station allowing Message Waiting set/reset to guest room
YY=40 Guest Station
- 00-15: Service Restriction Class A

(1) assigned by CM12 YY=02
0 : Restricted
(2) 1◀: Allow

CM13

Provide each station with Message Waiting Service (D^{term} or Single Line Telephone with Message Waiting Lamp).

- YY=03

(1) X-XXXX: Station No.
(2) 0: To provide

Specify guest station or administrative station to each station.

Note 1: *This data assignment is not required when Message Waiting is set by PMS.*

- YY=13

(1) X-XXXX: Station No.
(2) 0 : Administrative station
1◀: Guest station

CM20

Assign access code for Message Waiting Set/Reset/Retrieve from administrative station, if required.

Note 2: *This data assignment is not required when Message Waiting is set by PMS.*

- Y=0-3 Numbering Plan Group 0-3

(1) X-XXXX: Access Code
(2) A040: MW Lamp Control-Set
A041: MW Lamp Control-Reset
A147: MW Retrieve

A

A

	DESCRIPTION	DATA
CM51	Assign the Message Front destination to be routed by dialing MW Retrieve code or pressing MW key on D^{term} to which Message Waiting is set.	• YY=15 (1) 00-63: Tenant No. to which MW set D^{term} belongs (2) X-XXXX: Station No./My Line No. or E000: Attendant Console
CM08	If an Attendant Console is assigned to as the Message Front destination by CM51 YY=15, set the data for 233 to 0 and set the data for 234 to 1. With this setting, Message Waiting is automatically reset when the Attendant answers.	(1) 233 (2) 0 : Available (1) 234 (2) 1◀ : Not available
	To reset Message Waiting while the Message Front station or attendant rings, set the data for 234 to 0.	(1) 234 (2) 0: Available
	To reset Message Waiting when the desired station answers a second call from the Message Front station or attendant, set the data for 235 to 0 and set the data for 234 to 1.	(1) 235 (2) 0 : Available (1) 234 (2) 1◀: Not available
	Specify whether Message Waiting record is printed out on Hotel Printer, and the report is sent to PMS when setting or resetting Message Waiting.	(1) 267 (2) 0 : Available 1◀: Not available
CM90	Assign the Message Waiting function key to the D^{term} of administrative station or Front Desk Terminal or Attendant Console, if provided.	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) • For administrative station F0040: Message Waiting Set F0041: Message Waiting Reset • For guest station w/o MW Lamp F1005: Message Waiting Lamp (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6101: Message Waiting F6104: Reset

B

	DESCRIPTION	DATA
B		
CMD000	Send Message Waiting message to PMS when setting Message Waiting, if PMS provided.	(1) 116 (2) 1: To send
CMD015	Assign the Service Class number for CMD016 to required stations, if PMS provided.	(1) X-XXXX : Station No. (2) 00◀-15 : Service Class No.
CMD016	Send Room Status Code which includes Message Waiting record, to PMS, if PMS provided.	(1) XX 05:Room Status Code sending to PMS XX:Service Class No. assigned by CMD015. (2) 1: To send
END		

Hardware Required

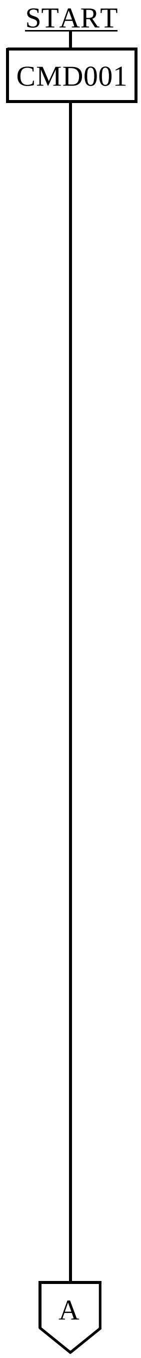
Single Line Telephone with Message Waiting Lamp
8LC or 4LCD/4LCF/4LCL/4LCW card

To provide Front Desk Terminal or PMS:
AP00-B card
Front Desk Terminal or
PMS and RS RVS-15S CA/RS RVS-4S CA/RS NORM-4S CA

PMS INTERFACE

PMS Interface

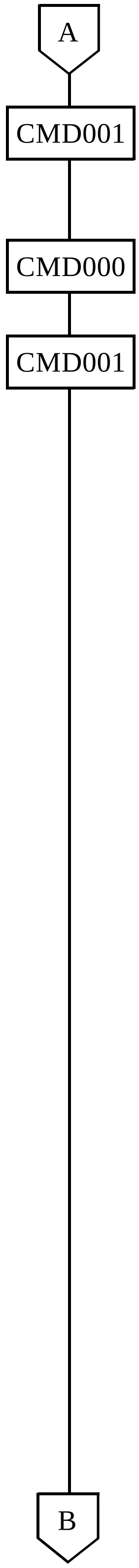
The following shows the minimal programming to establish the PMS interface link. After this programming, the Status Inquiry (Feature Code “70”, Function Code “F” and “0”) is available.



DESCRIPTION	DATA
Assign the attribute data, depending on the port (Port 0-3) connected to PMS. **AP INITIAL**	(1) See the following table. (2) See the following table.

◀: Initial Data

1ST DATA				MEANING	2ND DATA	MEANING
PORT 0	PORT 1	PORT 2	PORT 3			
20	24	28	32	Data speed	2/3/4/5 **Note 1**	1200/2400/4800/ 9600 bps
21	25	29	33	Stop bit length	0◀ /1/2	1/1.5/2 bits
22	26	30	34	Data length	0◀ /1	7/8 bits
23	27	31	35	Parity	0◀ /1/2	None Parity/Even Parity/Odd Parity
80	100	120	140	Function	4 **Note 2**	PMS
81	101	121	141	Priority for data processing	0◀	1st Priority
82	102	122	142	Message Format	6	PMS Format
83	103	123	143	Number of lines per page	0◀	Not used
84	104	124	144	Protocol	6	IMS Procedure
85	105	125	145	Station Address (SA)	49	1
86	106	126	146	Unit Address (UA)	33	!
87	107	127	147	Timer for detecting the terminal/no answer	8	1 second
89	109	129	149	Timer for detecting the end of block	70	35 seconds
90	110	130	150	Timer for detecting non data communication	70	35 seconds
91	111	131	151	Number of times to resend the Selecting Sequence when NAK is returned in Phase 2	3	3 times
92	112	132	152	Number of times to resend the Selecting Sequence when no answer in Phase 2	15	15 times
93	113	133	153	Number of times to resend the Selecting Sequence when NAK is returned in Phase 3	3	3 times
94	114	134	154	Number of times to resend the Selecting Sequence when no answer in Phase 3	32	15 times
95	115	135	155	Delay before resending the Selecting Sequence when NAK is returned	24	3 seconds
96	116	136	156	Delay before resending the text when WABT is returned	24	3 seconds
98	118	138	158	Guard timer between texts	0◀	Not used



DESCRIPTION	DATA

Note 1: *For the Port 1 and Port 3, data speed 9600 bps cannot be set.*

Note 2: *For the PMS, the 2nd data =4 should be assigned.*

Send a Violation Code Message when PBX receives an illegal message from PMS.

(1) 140
(2) 1: To send

Assign the function of OPE LED (L0-L3) on the AP00 card.

AP00 INITIAL

(1) 250
(2) See the table below.

0◀

L3	No. 3 port SD
L2	No. 2 port SD
L1	No. 1 port SD
L0	No. 0 port SD

1

L3	No. 0 port CS
L2	No. 0 port CD
L1	No. 0 port SD
L0	No. 0 port RD

2

L3	No. 1 port CS
L2	No. 1 port CD
L1	No. 1 port SD
L0	No. 1 port RD

3

L3	No. 2 port CS
L2	No. 2 port CD
L1	No. 2 port SD
L0	No. 2 port RD

When sending a call information to the PMS, do the following programming.

	DESCRIPTION	DATA
B		
CMD015	Assign the Service Class number to required stations.	(1) X-XXXX: Guest/Administrative station No. (2) 00◀-15: Service Class No.
CMD016	Send detail information of C.O. outgoing calls to PMS.	(1) XX 16 XX: Service Class No. assigned by CMD015 (2) 1: To send
END		

Hardware Required

PMS
AP00-B card
RS RVS-15S CA/RS RVS-4S CA/RS NORM-4S CA

ROOM CUT OFF

Programming

To provide the Room Cut Off from a Front Desk Terminal or Hotel Console, or PMS, do the following programming:

START	DESCRIPTION	DATA
CM08	Specify the type of call to be restricted by Room Cut Off.	(1) 232 (2) 0 : C.O. outgoing calls 1◀: All outgoing calls
	Specify whether Room Cut Off record is printed out on Hotel Printer, and the report is sent to PMS when setting or resetting Room Cut Off.	(1) 267 (2) 0 : Available 1◀: Not available
CM51	Assign the destination of a call transferred when the station in Room Cut Off condition dials outgoing access code.	• YY=11 (1) 00-63: Tenant No. (2) X-XXXX: Station No. or E000: ATTCON
CM90	Assign the Call Forwarding-Intercept (ICPT) key, if the ATTCON/DESKCON is assigned as destination by CM51 YY=11.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6065: Call Forwarding-Intercept
	Assign the function keys required for Room Cut Off on the Front Desk Terminal. **Note:** *This data assignment is not required when Room Cut Off is set by PMS.*	• YY=00 (1) My Line No. + $\boxed{,}$ + Key No. (2) F1065: Room Cut Off **Note** F1074: Set F1075: Reset F1077: Release
	Assign the function key required for Room Cut Off on the ATTCON/DESKCON, if provided.	• YY=00 (1) ATTCON No. (E000-E007) + $\boxed{,}$ + Key No. (2) F6100: Room Cut Off F6104: Reset
A		

A

	DESCRIPTION	DATA
CMD031	Assign the Room Cut Off function to the Room Status Code assigned by CMD001>12 and 13.	(1) X 00: Room Cut Off is set X 01: Room Cut Off is reset X: 1-8: Room Status Code (2) 1: Yes
CMD000	Send Controlled Restriction message to PMS when setting Room Cut Off feature, if PMS provided.	(1) 115 (2) 1: To send
CMD015	Assign the Service Class number for CMD016 to required stations, if PMS provided.	(1) X-XXXX: Station No. (2) 00◀-15: Service Class No.
CMD016	Send Room Status Code which includes Room Cut Off record, to PMS, if PMS provided.	(1) XX 05:Room Status Code sending to PMS XX:Service Class No. assigned by CMD015 (2) 1: To send

END

Hardware Required

AP00-B card
Front Desk Terminal or
PMS and RS RVS-15S CA/RS RVS-4S CA/RS NORM-4S CA

ROOM STATUS

Programming

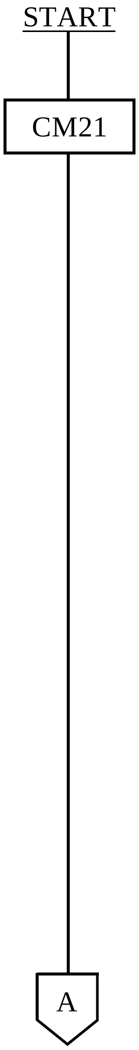
Refer to MAID STATUS on Page 559.

Hardware Required

AP00-B card
Front Desk Terminal

SINGLE DIGIT DIALING

Programming



DESCRIPTION

Assign the single digit access code for the required features.

For example, to provide the system with the following numbering plan:

1X:	Service Feature Access
2XX: 3XX: 4XX:	Station Numbers
8X:	Trunk Route Access
9:	C.O. Outgoing Access
0:	Operator Call
1-8:	Single Digit Station Numbers

The programming is:

(1) Assign digit 1 through 8 to the Single Digit station number (Data=801), respectively. Assign the other access code by CM20.
(2) Assign the station numbers (2XX, 3XX, 4XX, 1-8) to required LEN by CM10.

DATA

- Y=0-3: Numbering Plan Group 0-3

(1) X: Single Digit Access Code 0-9, A(*),
(2) B(#)

A047	: TAS Answer A
A048	: TAS Answer B
A049	: TAS Answer C
A050	: TAS Answer D
A051	: TAS Answer E
100-163	: Trunk Route 00-63
200-231	: Route Advance Block 00-31
800	: Operator Call
801	: Single Digit station No.

	DESCRIPTION	DATA
A		
CM20	If different digit station numbers of the same level are required within a system, set the leading one or two digit(s) to the data for the required combination of station numbering plan. For example, to provide the system with the following numbering plan: 200-299 : 3 digits station numbers 2100-2199 : 4 digits station numbers 2200-2299 : 4 digits station numbers Assign the digit “2” to data 824 (2-4 digits station) and then assign the station numbers to required LEN by CM10. For calling the station 200-299 press “#” key or wait for ring start after dialing the station number.	• Y=0-3: Numbering Plan Group 0-3 (1) X-XX: Leading one or two digit(s) of station No. (2) 823: 2-3 digits station 824: 2-4 digits station
CM41	Specify the single digit dialing time-out (Timing Start) timer.	• Y=0 (1) 13 (2) 03-08: 3-8 sec. (in 1 sec. increments) If no data is set, the default setting is 4-5 sec.
END		

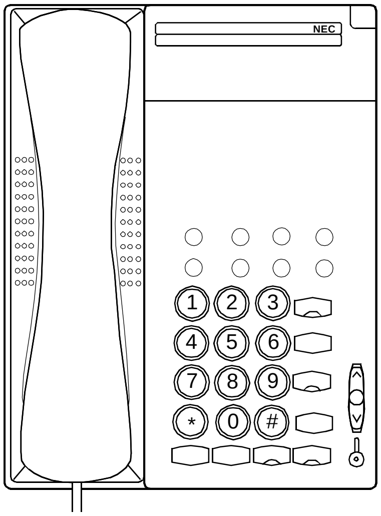
APPENDIX A

TERMINAL KEY ASSIGNMENT

This appendix contains the key number layout of each D^{term}, ATTCON, DESKCON, DSS Console, and Add-On Module.

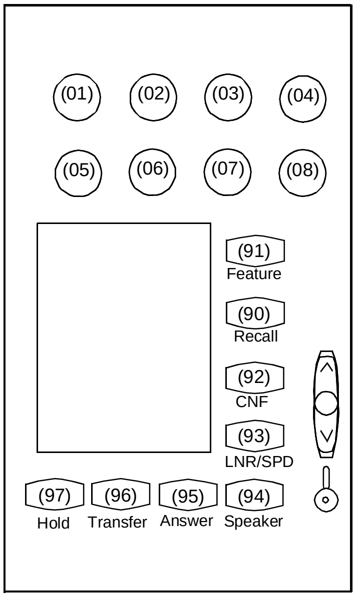
Refer to this appendix when you assign a key function by CM90 or CM97.

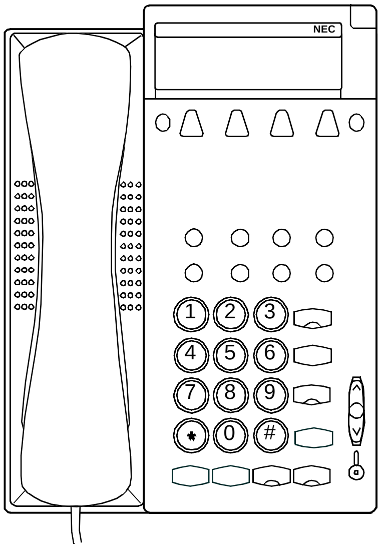
D^{term} Series E Key Numbers



DTP-8-1

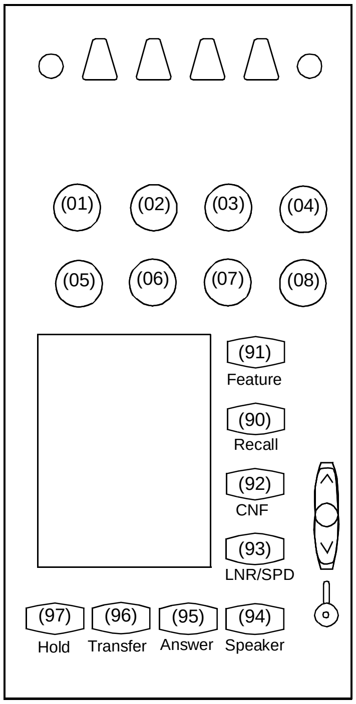
D^{term} Key Numbers



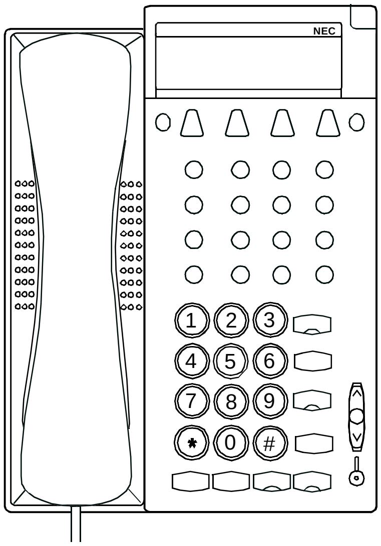


DTP-8D-1

D^{term} Key Numbers

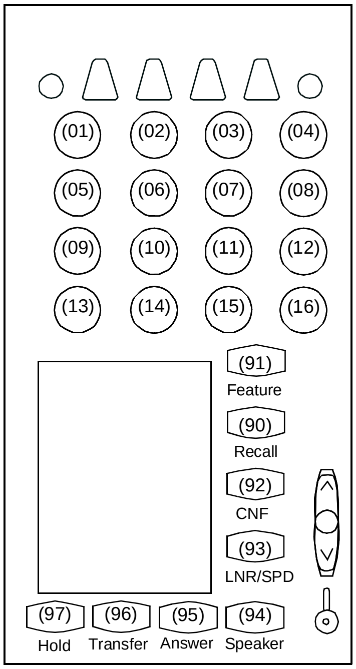


D^{term} Series E Key Numbers

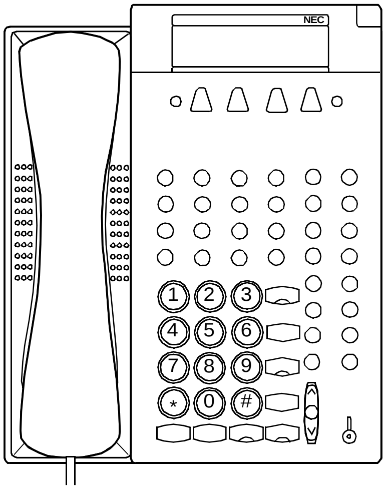


DTP-16D-1

D^{term} Key Numbers

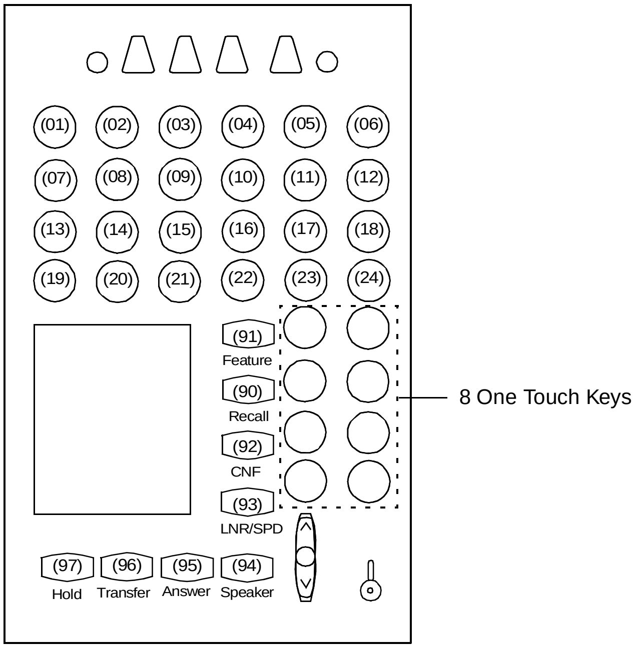


D^{term} Series E Key Numbers

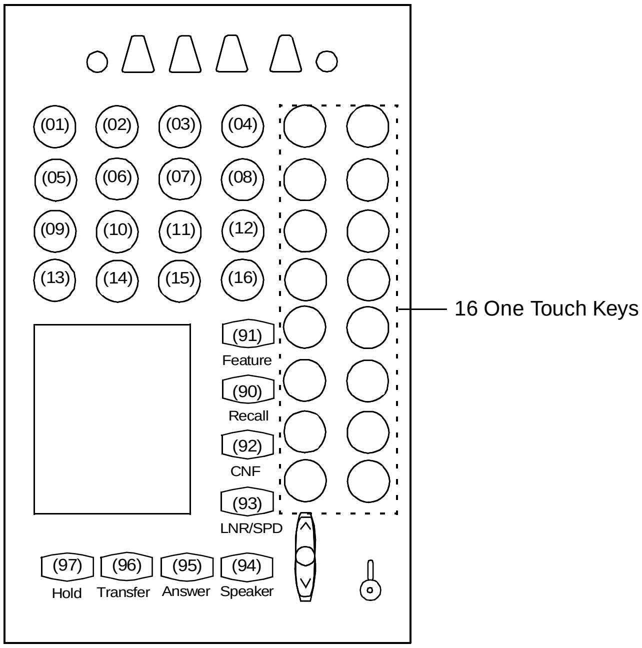


DTP-32D-1

D^{term} Key Numbers
24 Line/Trunk/Feature Keys + 8 One Touch Keys

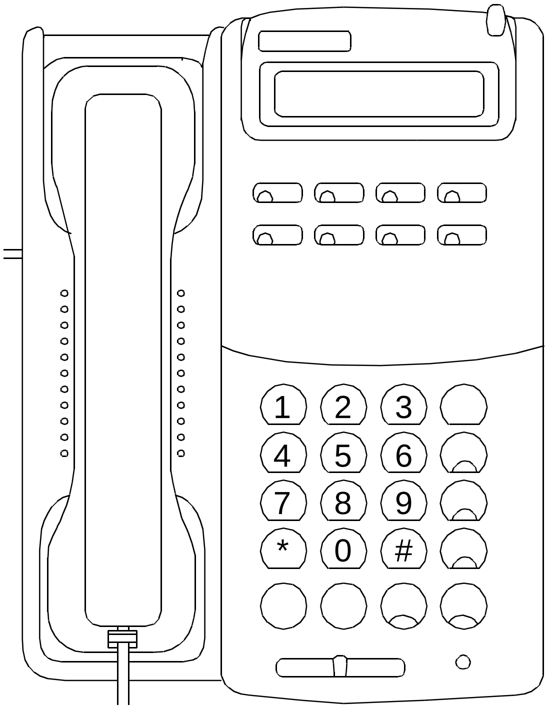


D^{term} Key Numbers
16 Line/Trunk/Feature Keys + 16 One Touch Keys

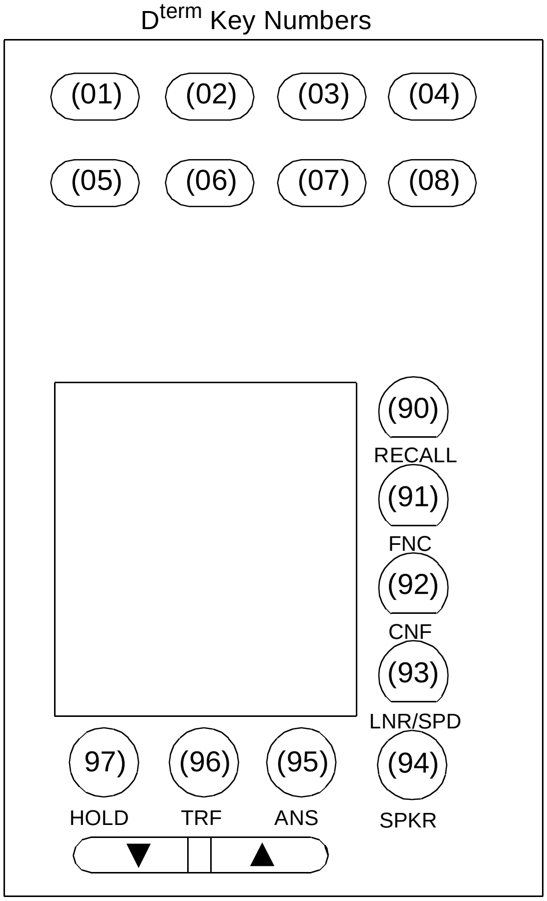


Note: *The initial setting of key layout is for 16 Line/Trunk/Feature keys + 16 One Touch keys. When using Key No. 17-24, set CM12 YY=24, 2nd data=0. After the second data of CM12 YY=24 is changed, pull out and reconnect the modular connector of the D^{term}.*

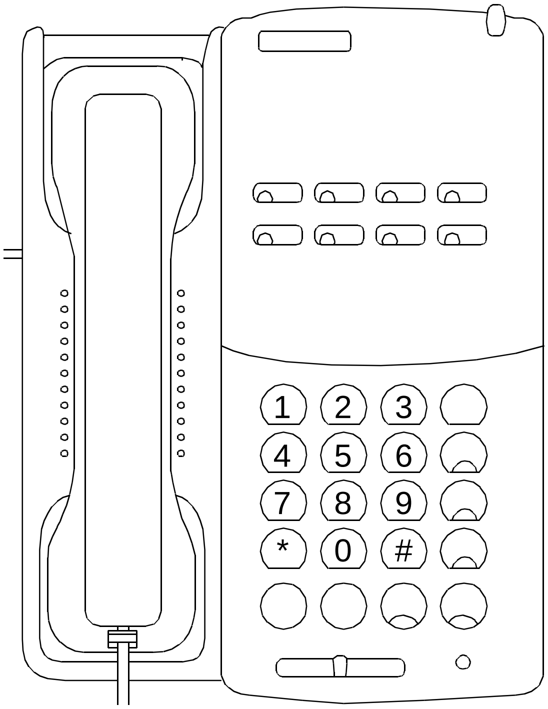
D^{term} Series III Key Numbers



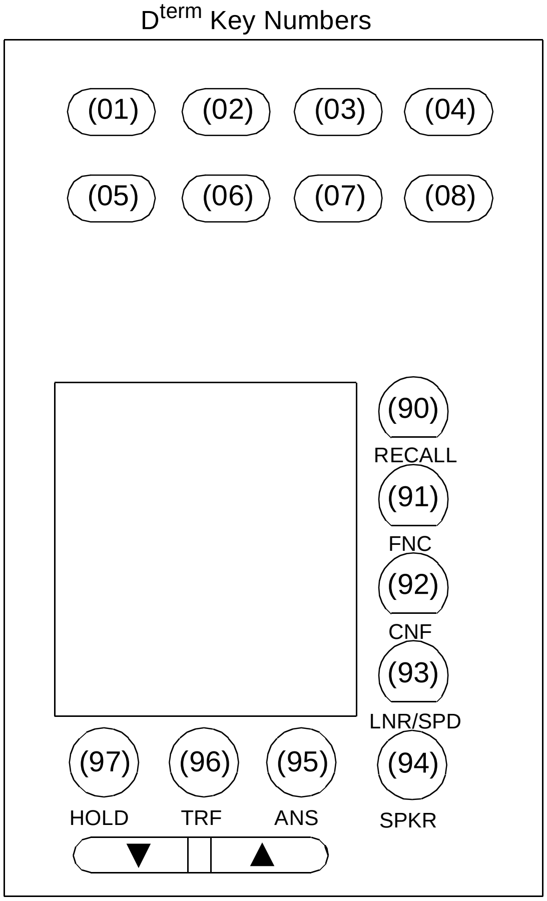
ETJ-8DC-1



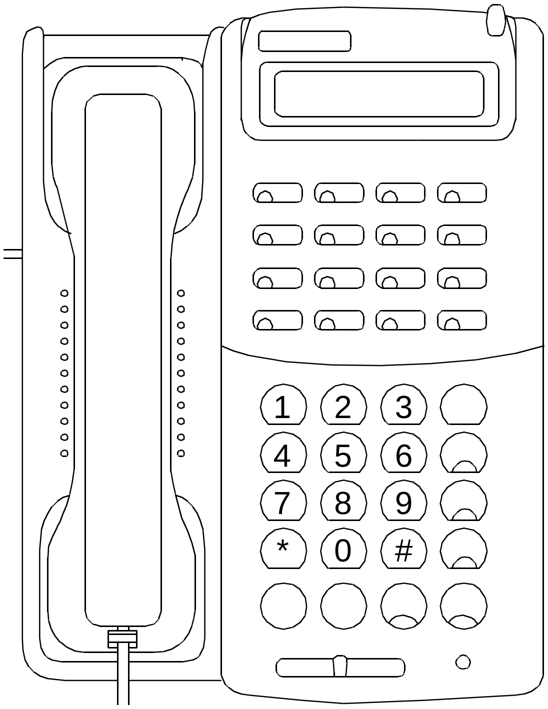
D^{term} Series III Key Numbers



ETJ-8-1

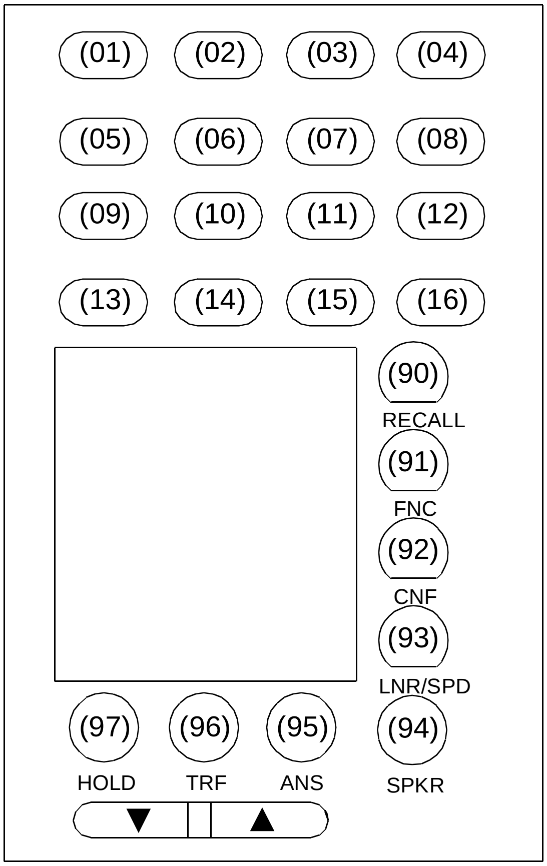


D$^{\text{term}}$ Series III Key Numbers



ETJ-16DC-1

D$^{\text{term}}$ Key Numbers



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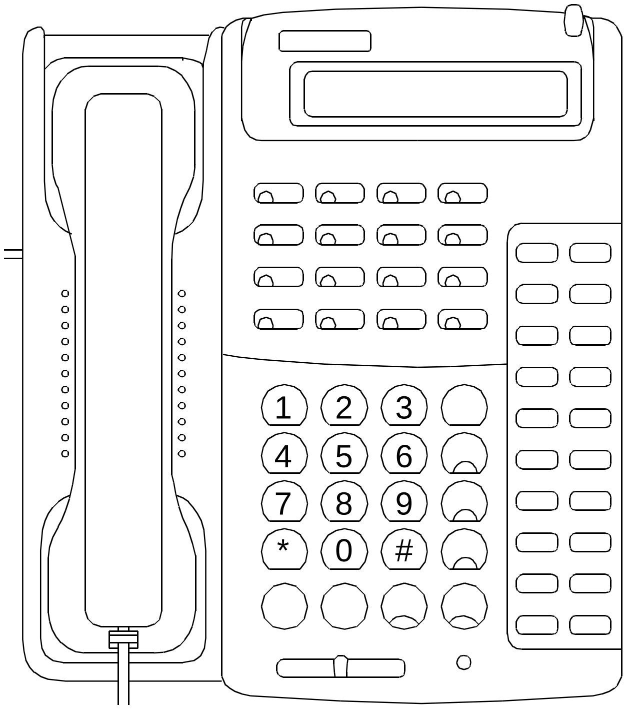

ETJ-16DD-1

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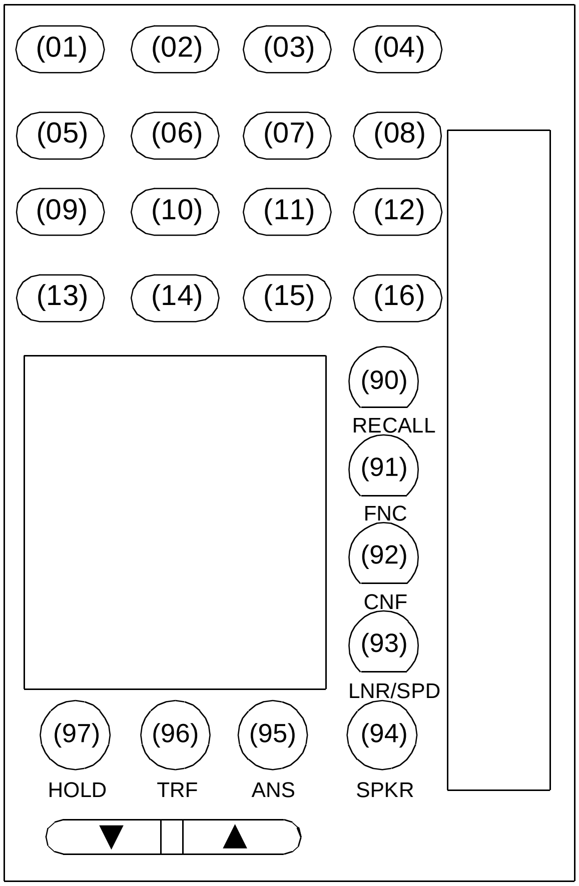
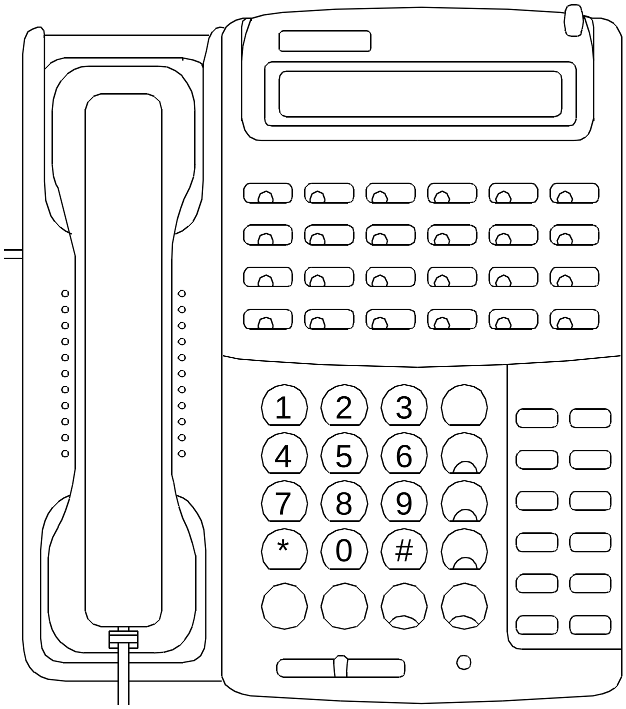
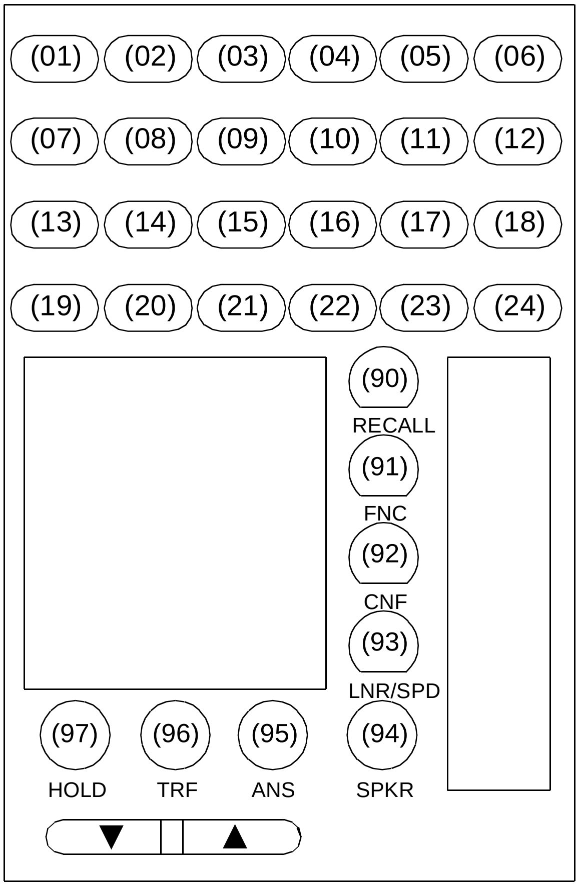


D^{term} Series III Key Numbers



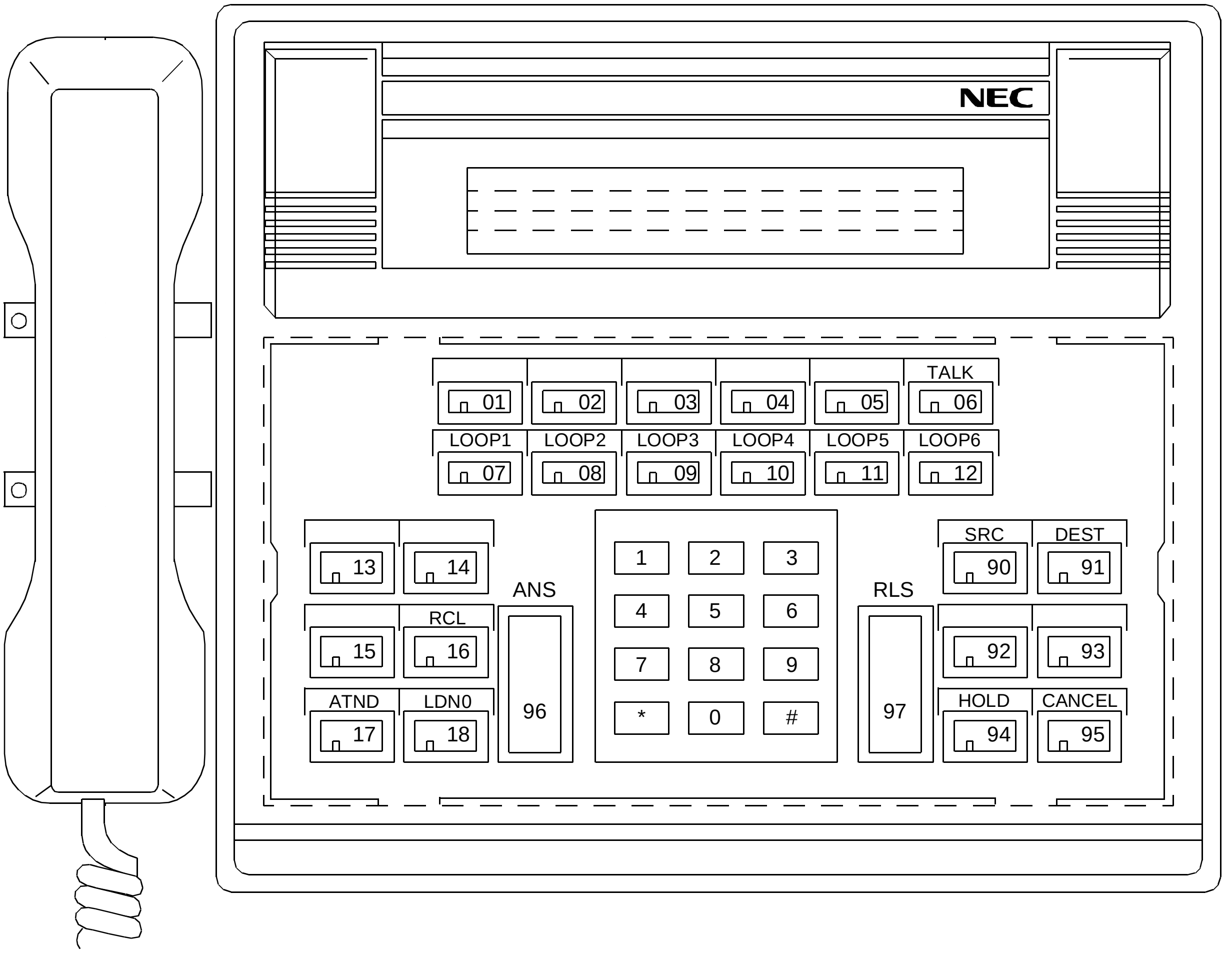
ETJ-24DS-1

D^{term} Key Numbers

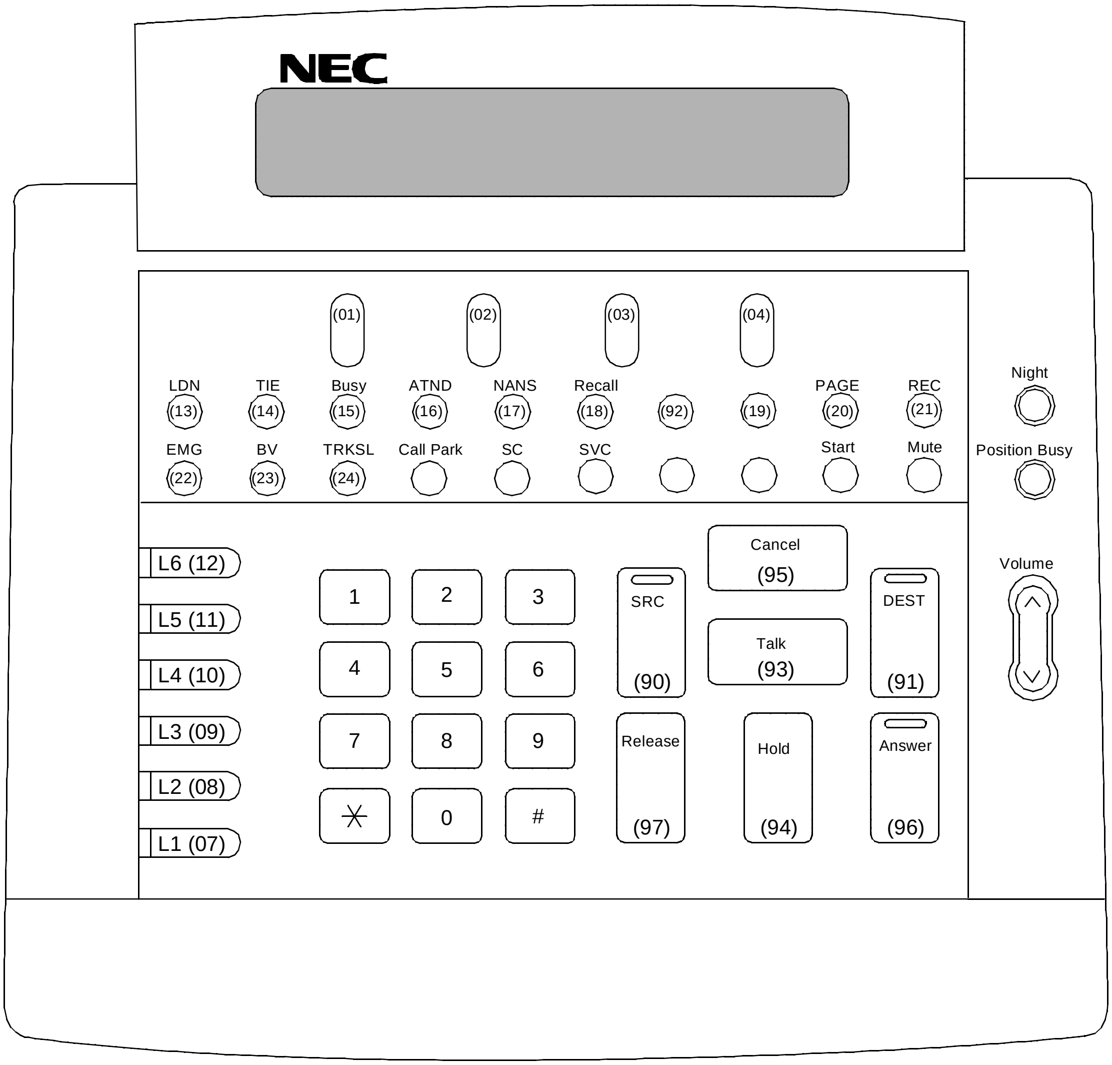


Note: *When using Key No. 17-24, set CM12 YY=24, second data=0. After the second data of CM12 YY=24 is changed, pull out and reconnect the modular connector of the D^{term}.*

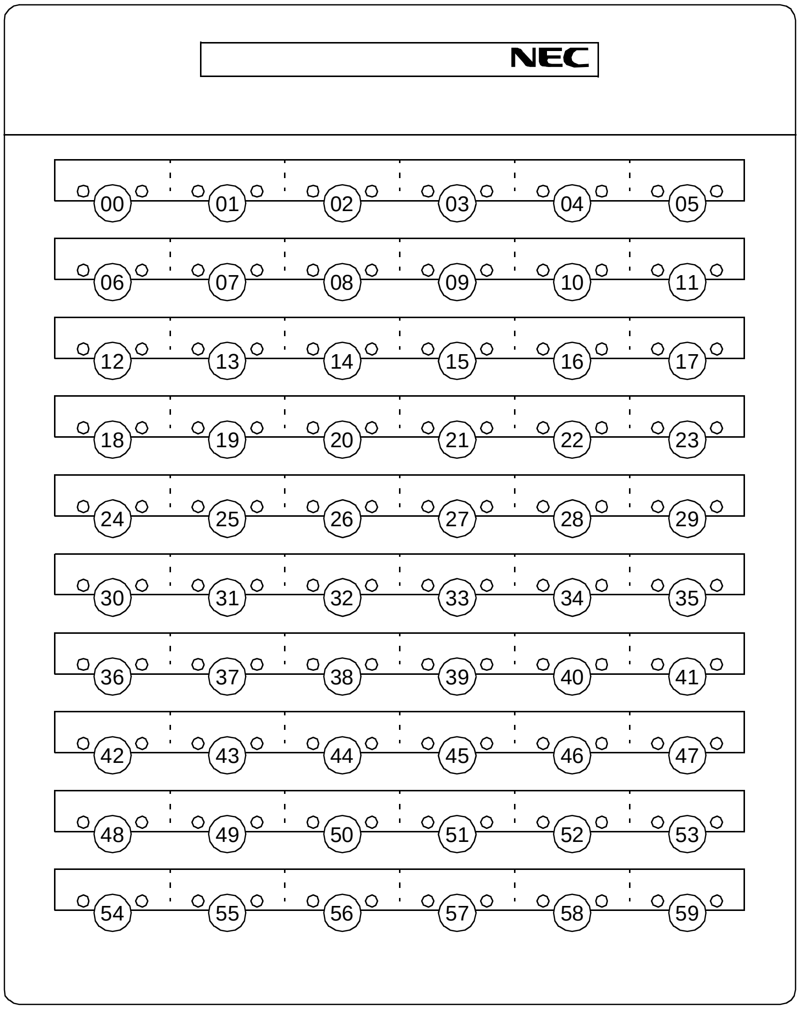
ATTCON Key Numbers



DESKCON Key Numbers

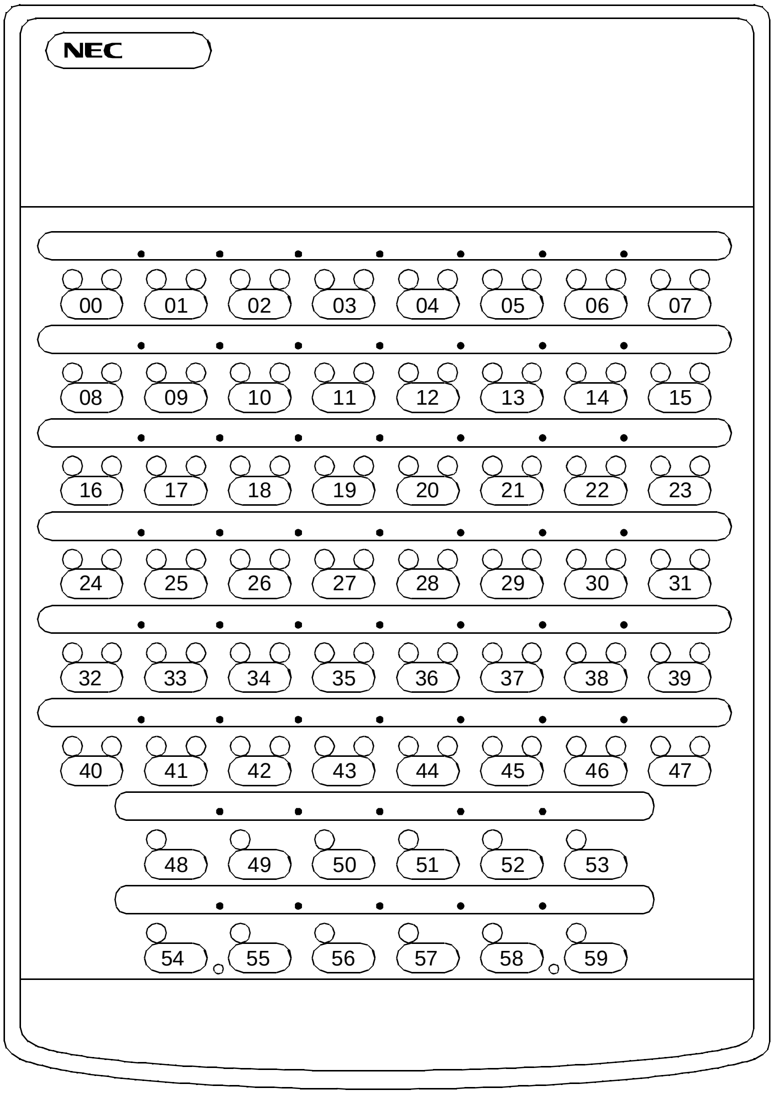


DSS Console Key Numbers



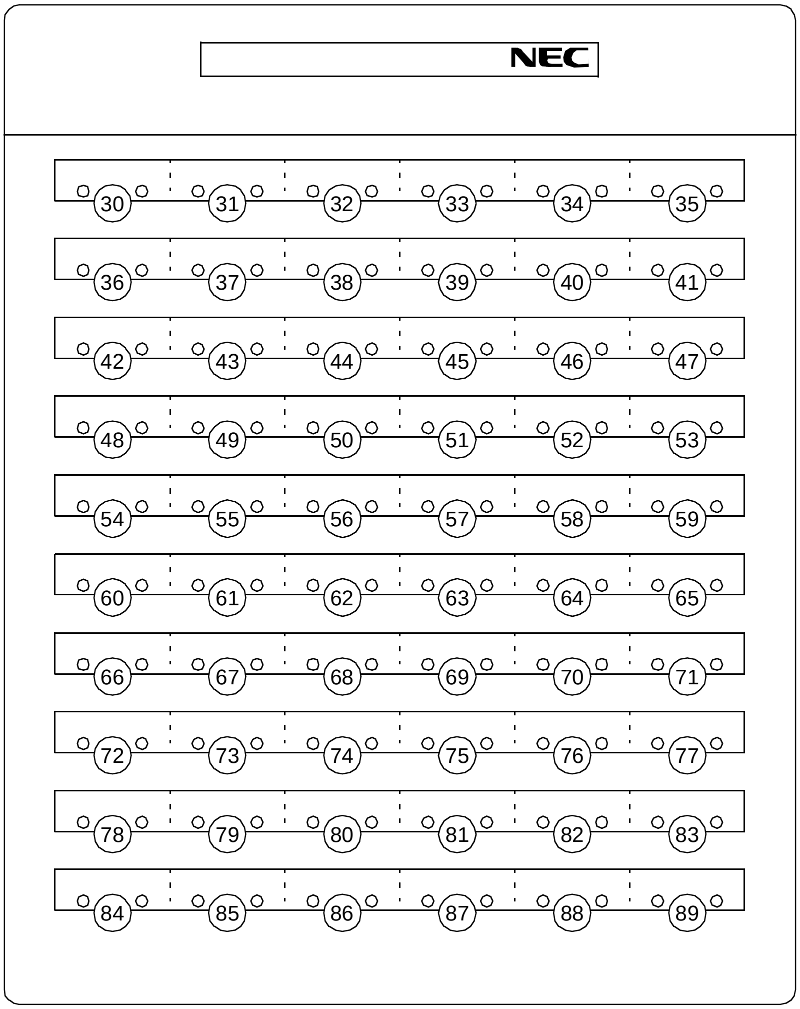
DCU-60-1

DSS Console Key Numbers



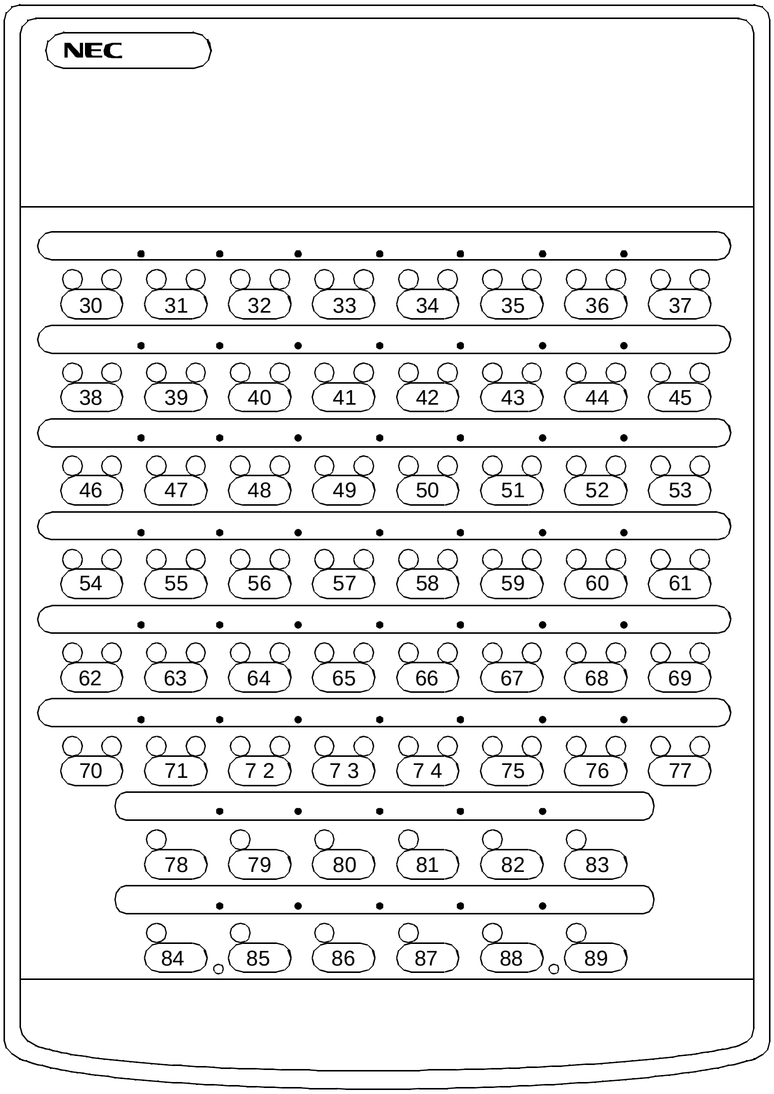
EDW-48-2

Add-On Module Key Numbers



DCU-60-1

Add-On Module Key Numbers



EDW-48-2

This page is for your notes.

APPENDIX B

CHARACTER CODE TABLE

This appendix contains the character code table to set a station name that is displayed on a D^{term} or Attendant Console.

Character Code Table

X : Upper digit
Y : Lower digit

X Y	2	3	4	5	6	7
0		0	@	P	\	p
1	!	1	A	Q	a	q
2	”	2	B	R	b	r
3	#	3	C	S	c	s
4	$	4	D	T	d	t
5	%	5	E	U	e	u
6	&	6	F	V	f	v
7	’	7	G	W	g	w
8	(	8	H	X	h	x
9	)	9	I	Y	i	y
A	*	:	J	Z	j	z
B	+	;	K	[	k	{
C	,	<	L	×	l	|
D	-	=	M	]	m	}
E	.	>	N	^	n	
F	/	?	O	_	o	

Example: *To set “John” for Station No. 2587, do the following operation:*

$$\boxed{\textbf{ST}} + 770 + \boxed{\textbf{DE}} + 2587 + \boxed{\textbf{DE}} + \underset{J}{\underline{4A}}\ \underset{o}{\underline{6F}}\ \underset{h}{\underline{68}}\ \underset{n}{\underline{6E}} + \boxed{\textbf{EXE}}$$